

# DELTA AS A PLACE: LAND USE WHITE PAPER

Prepared for consideration by the Delta Stewardship Council

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Not reviewed by or approved by the  
Delta Stewardship Council

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## Executive Summary

The Delta is a significant region with a distinctive social, cultural, and natural heritage. The Delta's predominant land use is agriculture, with small unincorporated communities and "legacy communities" or towns with distinct natural, agricultural, and cultural heritage. These towns possess a rural charm and include cultural events, specialty local businesses, and nearby recreational opportunities that are attractive to many visitors. Land uses in the Delta reflect a combination of historic trends, property owner initiatives, public and private investments in infrastructure (particularly roads, flood control, and water conveyance), and local government. The Delta is also an important industrial area, with agricultural and other industries and a complex network of pipelines and above-ground transmission lines serving and connecting the Delta with the San Francisco Bay, Sacramento, and Stockton urban regions.

However, behind the picturesque landscape of the Delta lie very real threats to the vitality of the Delta as a place, as an agricultural productivity center, as an economic generator, and as a cultural and historic place. Based on the number and type of threats that the Delta faces, it is clear that the Delta is not sustainable if current policies and practices remain in effect and a "business as usual" approach is taken to managing the Delta's resources.

As an economic place, the Delta is dependent upon agriculture, the acreage of which has declined since the 1980s, and recreation, which is not adequate, by itself, to support the Delta economy. Continued

pressure exists to develop lands within the Delta, which adversely affects both agriculture and ecosystem restoration. The Delta's levee system continues to decline due to failing levee integrity and subsidence. This decline not only affects the levees but the entire Delta economy, ecosystem, way of life, and communities in the Delta. These will be at greater risk due to sea level rise and predicted climate changes that could intensify storms, leading to greater threats of levee failure, flooding, and inundation of Delta lands. This risk is real and will intensify with time. There are few, if any, emergency response plans for individual communities to warn and evacuate people from flooding islands.

A wide range of threats face the Delta: potential sea level rise caused by climate change; levee breaks caused by earthquakes, floods, subsidence, or inadequate design; conversion of agricultural land to other uses; increased surface and groundwater pumping; and saltwater intrusion could all drastically affect the Delta's ecosystem, economic viability, and desirability as a place to live, work, and visit. Increasing population growth in the Delta, particularly in areas along its periphery, continue to stress Delta resources.

Many residents have lived in the Delta for generations, understand and respect the inherent risks, and have learned good emergency practices. However, the past several decades have brought tens of thousands of new residents to the Delta. Many of these new residents do not know about or understand the risks and how to respond in emergency situations. They will require education on the realities of life in the Delta in the event a disaster strikes their community.

These threats may be compounded by piecemeal planning and policies. County planning priorities for agriculture, economic development, water supply, and flood protection generally focus on county-specific concerns and benefits. Although each Delta county recognizes the importance of the Delta's resources and enacts policies to protect them, they may not take the same approach. Inconsistent planning and policy development among counties will likely fail to comprehensively address threats facing the Delta as a whole. Competing priorities between local, regional, and statewide goals and policies affecting the Delta could also impair new ideas and actions to protect the Delta. If continued, this piecemeal approach to planning will result in competing priorities and the inevitable sacrifice of one or more of the Delta's important resources.

The absence of a regional or statewide vision for how to address growing concerns in the Delta means that by default, local interests will continue to guide development and conservation in a piecemeal fashion which may lead to inconsistencies between adjacent communities, counties, regions, and the State. Therefore, a coordinated, collaborative effort to plan land uses in the Delta with all stakeholders should be established. A regionwide or statewide approach to establishing priorities and managing Delta resources is necessary to establish specific common goals that balance needs and provide all stakeholders with greater certainty about the Delta's future.

Various county general plan policies described in this white paper recognize potential risks to uses in their respective counties. However, there is not overall recognition or strategy of how to deal with of all the potential specific threats to the Delta, its way of life, or its economy. These risks include:

- ◆ Protection of Delta communities, culture, and economic sustainability
- ◆ Infrastructure, utilities, and transportation
- ◆ Agriculture
- ◆ Industry
- ◆ Recreation and tourism
- ◆ Land protected by levees
- ◆ Water supply and quality

There appears to be a divide between local goals and policies and statewide goals and policies as they relate to the Delta. The general plans tend to focus inward, planning only for future uses and effects

1 within their boundaries. Little consideration is made for how the county fits into the bigger picture, such  
2 as the Delta region or the state. Instead, county policies focus mainly on local goals such as continued  
3 agricultural production, economic development, water supply, and flood protection. Although there is  
4 some recognition of the interconnectedness of the Delta counties, most of the policies do not embrace a  
5 big-picture focus.

6 An integrated approach to water, land use, and resource management planning can better achieve multiple  
7 objectives for the Delta by enhancing and restoring the cultural and economic sustainability of residents,  
8 businesses, and agricultural and recreational interests while also maintaining a healthy ecosystem.  
9 Sufficient flood protection (including levee maintenance and improvement and subsidence mitigation)  
10 will be necessary to protect existing Delta communities, agriculture, and public infrastructure. However,  
11 such flood protection should not encourage additional conversion and urbanization of Delta lands beyond  
12 existing community boundaries. Local land use decisions also need to ensure that sufficient fresh water  
13 flow and water quality can be maintained in and through the Delta to meet the needs of Delta water users,  
14 recreation, and habitat preservation.

15 As development expands, so does vital infrastructure and the population living in communities protected  
16 by levees. The possibility of inundation caused by levee breaks, whether triggered by a seismic event,  
17 oversaturation, or another structural failure, is high. Agriculture, industry, recreation, and visitor-oriented  
18 activities, the lifeline of the Delta's economy, depend on these infrastructure systems. In addition, most  
19 working residents of the Delta do not have jobs in Delta communities, so interruptions to critical  
20 infrastructure could affect their ability to get to work. The largest projected damages in the Delta from  
21 climate change will come from sea-level rise threatening large portions of California's coastal and Delta  
22 transportation, housing, and energy-related infrastructure. Rising groundwater levels could threaten the  
23 integrity of many underground pipelines and the effective operation of these pipelines. Impacts associated  
24 with construction of transmission lines and pipelines could depend on their current locations and  
25 replacement needs (for example, whether future replacement of utilities can be located in existing utility  
26 of transportation corridors, along property lines, and along the edges of fields to reduce possible  
27 disruption of agricultural operations).

28 The future agricultural economy is threatened by potential conversion of farmland to non-farming  
29 purposes. This conversion could adversely affect the farmworkers, businesses, utilities, and tax-funded  
30 entities that form the basis of the agricultural economy. Wildlife that inhabit the farmland also could be  
31 adversely affected. Subsidence of agricultural lands, particularly on Delta islands, is also a growing threat  
32 to the viability of agriculture. Many levees currently protect subsiding Delta islands from flooding. As  
33 islands continue to subside, there are increased risks for levee failure resulting in an increased risk of  
34 flooding. The costs to recover a flooded island could be great.

35 Urbanization and development of agricultural areas also have been affected by local planning policies that  
36 do not limit areas for future urban growth, require that subdivided lands be limited to agriculturally  
37 oriented land uses, provide for adequate buffers between agricultural and non-agricultural land uses,  
38 promote "right-to-farm" ordinances, and encourage the use of conservation easements.

39 The Delta industries would be severely impacted by water quality degradation due to sea level rise, salt  
40 water intrusion, flooding, or reductions in water supplies. Transportation infrastructure is also at risk.  
41 Threats could include inundation of rail and highway corridors due to levee failure or sea level rise,  
42 sediment accumulation in the Sacramento or Stockton Deep Water Ship Channels, or interruption of  
43 natural gas and other energy infrastructure supplies that cross the Delta. If realized, these threats could  
44 isolate Delta industries and increase the challenge of getting goods and materials to market, severely  
45 impacting the Delta economy.

46 Delta levees are constantly holding back water, protecting land that is often below sea level and would  
47 otherwise be inundated by the tides. Delta levees protect critical infrastructure of statewide importance,

1 including rail lines, petroleum product pipelines, electricity transmission lines, water pipelines, and  
2 highways. Delta levees also protect tens of thousands of acres of prime agricultural land and are a vital  
3 component of fish and wildlife habitat.

4 Levees in the Delta, as well as the lands behind them and the waterways they border, are at risk. Delta  
5 levees face a long list of potential threats: earthquakes, floods, subsidence, and sea-level rise are among  
6 the most notable. Delta levees face risk of high water overtopping during the wet season, particularly  
7 when large storms coincide with high tides. Low barometric pressures associated with large storms raise  
8 water surface levels in Delta and Suisun Marsh channels. Damage to levees could also occur due to sea  
9 level rise and other aspects of climate change. Each of these risks alone is cause for concern; however,  
10 together they represent a significant threat to the levees in the Delta and the people and property they  
11 protect. Each of these risks cannot be considered individually. The combination and/or coincidence of  
12 these risks must also be considered when developing a strategy to prioritize risk reduction actions.

13 Many Delta communities, farmers, businesses, and individual property owners rely on clean, available  
14 groundwater and surface water to meet their needs. Groundwater levels and quality in parts of San  
15 Joaquin County are declining. Groundwater in San Joaquin County flows toward the Delta, but depressed  
16 groundwater levels have reversed this natural flow. This has lead to the migration of saline groundwater  
17 eastwardly from the Delta. As saline groundwater continues to flow to the east, increasing numbers of  
18 wells are expected to be removed from service. The effect of declining groundwater levels has been  
19 increased pumping costs, reinvestment in deeper wells and larger pumps, and degradation of groundwater  
20 water quality.

21 Due to high water table in the Delta, the use of septic and other individual onsite wastewater treatment  
22 systems could affect surface water quality if not properly designed, operated, and maintained. These  
23 systems could become increasingly vulnerable to flooding and inundation.

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## Section 1 Introduction

In November 2009, the California Legislature enacted SBX7 1 (Act), one of several bills related to water supply reliability, ecosystem health, and the Sacramento–San Joaquin Delta (Delta). The Act became effective on February 3, 2010.

In the Act, the Legislature declared the Delta a critically important natural resource for California and the nation. It serves Californians concurrently as both the hub of the California water system and the most valuable estuary and wetland ecosystem on the west coast of North and South America. The Legislature also declared that the Delta watershed and California’s water infrastructure are in crisis and existing Delta policies are not sustainable, and that resolution of the crisis requires fundamental reorganization of the state’s management of Delta watershed resources. In response to the Delta crisis, the Legislature and the Governor required development of a new long-term strategic vision for managing the Delta. The Governor appointed a Blue Ribbon Task Force to develop the *Delta Vision Strategic Plan* (Strategic Plan). The Strategic Plan, submitted to the Governor and the Legislature on January 3, 2009, identified that the Delta conditions were declining due to:

- ◆ Degradation of water resources, water quality, and ecosystem conditions in the Delta
- ◆ Risks related to catastrophic failure of levees due to earthquakes, floods, sea level rise, and land subsidence
- ◆ Potential increased risks due to recent residential development in the Delta that could further degrade water resources, water quality, and ecosystem resources and increase risks to human life

These issues were considered by the Legislature in identifying the following basic goals of the state for the Delta:

- ◆ Achieve the two coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.
- ◆ Protect, maintain, and, where possible, enhance and restore the overall quality of the Delta environment, including, but not limited to, agriculture, wildlife habitat, and recreational activities.
- ◆ Ensure orderly, balanced conservation and development of Delta land resources.
- ◆ Improve flood protection by structural and nonstructural means to ensure an increased level of public health and safety.

The Legislature required development of the Delta Plan to meet the coequal goals and the inherent subgoals defined by statute to define an integrated and legally enforceable set of policies, strategies, and actions that will serve as a basis for future findings of consistency by state and local agencies with regard to their Delta-related projects, and for subsequent evaluation of those findings by the Delta Stewardship Council (Council) on appeal, as provided in statute and Council regulation.

As an initial step in the development of the Delta Plan, white papers are being developed to summarize:

- ◆ Historical activities that have contributed to existing conditions and current uses of Delta resources
- ◆ Current conditions related to uses of Delta resources
- ◆ Jurisdictional responsibilities, including overlapping authorizations
- ◆ Future issues related to Delta resources

The white papers are not intended to describe the existing and projected conditions in detail. The more detailed discussions of existing and projected conditions will be presented in the Delta Plan Environmental Impact Report (EIR). Draft versions of the EIR chapters related to the existing and projected future conditions without implementation of the Act will be provided in early 2011 for review by the Council and the public.

## Purpose and Use

This white paper is intended to describe land use patterns in the Delta and local plans and other policy guidance documents that guide those uses in sufficient detail to inform policy development for the Delta Plan. This paper is also intended to aid understanding of how urbanization and/or conservation policies in and around the Delta would address future issues facing the Delta and whether these policies are consistent or inconsistent with the policy direction given by the Act. In addition, this white paper serves as the substantial basis for the environmental setting section of the Delta Plan EIR. This white paper

focuses on the five primary counties (and cities in those counties) that are within the Primary and Secondary Zones of the Delta—Contra Costa, Sacramento, San Joaquin, Solano, and Yolo. A small portion of Alameda County, the northeast corner bordering San Joaquin and Contra Costa counties, is in the Secondary Zone. This part of Alameda County contains agricultural lands and facilities, and few residences, roads, and water conveyance infrastructure.

## Statutory Requirements

The Act (Water Code [Wat. Code] section 85020) stated that the policy of the State of California is to achieve the following objectives that the Legislature declares are inherent in the coequal goals for management of the Delta:

- (a) Manage the Delta's water and environmental resources and the water resources of the state over the long term.
- (b) Protect and enhance the unique cultural, recreational, and agricultural values of the California Delta as an evolving place.
- (c) Restore the Delta ecosystem, including its fisheries and wildlife, as the heart of a healthy estuary and wetland ecosystem.
- (d) Promote statewide water conservation, water use efficiency, and sustainable water use.
- (e) Improve water quality to protect human health and the environment consistent with achieving water quality objectives in the Delta.
- (f) Improve the water conveyance system and expand statewide water storage.
- (g) Reduce risks to people, property, and state interests in the Delta by effective emergency preparedness, appropriate land uses, and investments in flood protection.
- (h) Establish a new governance structure with the authority, responsibility, accountability, scientific support, and adequate and secure funding to achieve these objectives.

The Act provided additional direction by stating that it is the policy of the State of California to reduce reliance on the Delta in meeting California's future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency. Each region that depends on water from the Delta watershed shall improve its regional self-reliance for water through investment in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply efforts (Wat. Code Section 85022).

One of the primary goals of the Act is to achieve more effective integration of land use policies in the Delta. Many plans and projects can affect the land forms and land uses in the Delta, including work on flood management policies affecting levees, flood ways and allowable land uses, patterns of land use allowed under the policies of the Delta Protection Commission (DPC) and local governments, ecosystem restoration projects, improved water conveyance, and other infrastructure investments. Among the existing plans shaping land uses in the Delta are county and city general plans and zoning, county Habitat Conservation Plans, and the DPC Land Use and Resource Management Plan, among others. The Council intends to develop a map of existing Delta land uses as a tool to begin to show and integrate the effects of land use policies. Maps and policies included in this white paper initiate the development of this tool.

Figure 1-1 shows the Primary and Secondary Zones of the Delta and the counties, cities, and unincorporated communities within, or partly within, those zones.



1 **Figure 1-1**  
2 **Primary and Secondary Delta Zones**  
3 *Source: Delta Protection Commission*



## Planning and Land Use

Title 7 of the California Government Code provides the statutory authority and sets forth legal requirements for cities and counties to plan and regulate land use. The following is an overview of key planning and zoning requirements of State law.

### *General Plans*

California planning law requires cities and counties to prepare and adopt a “comprehensive, long-range general plan” to guide development (Government Code [Gov. Code] section 65300). To successfully guide long-range development, a general plan requires a complex set of analyses, comprehensive public outreach and input, and public policy for a vast range of topic areas. State law also specifies the content of general plans. Current law requires seven mandated elements:

- ◆ Land use
- ◆ Circulation
- ◆ Housing
- ◆ Conservation
- ◆ Open space
- ◆ Noise
- ◆ Safety

A general plan must contain development policies, diagrams, and text that describe objectives, principles, standards, and plan proposals. According to the guidelines of the Governor’s Office of Planning and Research (OPR) guidelines regarding general plans, topics from different elements may be combined, but all must be addressed within the general plan. Cities and counties may include other topics in their general plans as optional elements, and many do so. Examples include agriculture, water resources, local economy or economic development, infrastructure and public services, and, more recently, climate change.

### *Specific Plans*

Article 8 of the Government Code allows cities and counties to prepare specific plans, which are detailed sub-area plans intended to implement a local general plan. Specific plans contain greater detail than a general plan regarding:

- ◆ Distribution, location, and extent of land uses (including open space)
- ◆ Proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan
- ◆ Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable
- ◆ A program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out the plan

Specific plans must be consistent with the local general plan and include a statement of the relationship of the specific plan to the general plan. Specific plans may address any other subjects that are necessary or desirable for implementation of the general plan. In addition, public works projects, subdivision maps, and zoning codes affecting properties within a specific plan area must be consistent with that plan.

## *Housing Elements and Regional Housing Allocations in the Delta*

As with many regions of California, the periphery of the Delta is undergoing rapid urbanization. Current and future population growth increases the demand for land for development, particularly in areas near the Bay Area, Stockton, and Sacramento. This demand results in conversion of open space, primarily agricultural land, to residential and commercial use. Between 2007 and 2014, the five primary counties and ten cities in the Delta zones are expected to accommodate 161,650 additional housing units, of which, 58,334 should be affordable to households earning 80 percent or less of the median household income in the metropolitan areas in which these cities and counties are located. Table 1-1 summarizes the housing allocation numbers. Estimates prepared by staff for the Central Valley Flood Protection Board indicate that as many as 130,000 new homes could be constructed within the legal Delta in the next decade (California Department of Water Resources [DWR], 2007).

Article 10.6 of the Government Code outlines the State's Housing Element requirements. The Housing Element must analyze existing and projected housing needs, examine special housing needs within the population, evaluate the effectiveness of current goals and policies, identify governmental and other constraints, determine compliance with other housing laws, and identify opportunities to incorporate energy conservation into the housing stock. The element must also establish goals, policies, and programs to maintain, enhance, and develop housing. Each city and county's housing element is required to demonstrate how it will accommodate its fair share of the region's future housing needs for all income groups.

The California Department of Housing and Community calculates regional housing allocations by income level for each area of the state covered by a council of governments (COG) and individual rural county without COGs. A COG, in turn, prepares a housing allocation plan that assigns a portion of the region's future housing needs to each city and county in the region. The Delta counties fall within three COGs: 1) Association of Bay Area Governments (Contra Costa and Solano counties), 2) Sacramento Area Council of Governments (Sacramento and Yolo counties), and 3) San Joaquin Council of Governments (San Joaquin County).

The number of housing units that each Delta county is expected to accommodate varies significantly, as shown in Table 1-1. For example, Solano County's regional housing allocation is only 99 units. The county has a long-standing agreement with its cities to accommodate housing development requiring municipal services within city limits in order to minimize the conversion of agricultural and other open space lands to urban uses. By contrast, Sacramento County's regional housing allocation is 15,160 units. Sacramento County has a long-standing history of urbanization in the unincorporated area. In fact, Sacramento County's unincorporated area population of 567,700 is larger than that of the City of Sacramento (486,189) (California Department of Finance, 2010).

## *Zoning*

"Jurisdictional Responsibilities" in Section 3 provides the authorization and sets the requirements for cities and counties to adopt zoning ordinances that regulate land use and development. As noted above, zoning ordinances must be consistent with general plans and specific plans. Zoning ordinances specify the details of permitted uses, lot sizes, residential densities and non-residential intensities of land use, the standards and conditions under which development may be permitted, the process by which development proposals will be considered and approved, and other details of development.

In recent years, many cities and counties have adopted illustrated site planning and design guidance (sometimes referred to as "form-based" codes) to better describe community expectations about the quality and performance of new development. Zoning codes are increasingly being transformed into comprehensive development codes to better address design quality, compatibility of new development, stormwater management, energy and water efficiency, protection of natural environments and ecological systems, and reducing the "footprint" of development on the natural landscape. Numerous cities and counties within the

Delta have, or are in the process of, updating their development regulations to better reflect community desires for more sustainable development.

**Table 1-1**  
**Regional Housing Allocations for Delta Counties and Cities**

| <b>County/City</b>         | <b>Total Housing Allocation</b> | <b>Households w/ 80% of Median Income</b> |
|----------------------------|---------------------------------|---|
| <b>Contra Costa County</b> | <b>11,042</b>                   | <b>4,334</b>                              |
| Antioch                    | 2,282                           | 885                                       |
| Brentwood                  | 2,705                           | 1,152                                     |
| Oakley                     | 775                             | 339                                       |
| Pittsburg                  | 1,772                           | 545                                       |
| Unincorporated County      | 3,508                           | 1,413                                     |
| <b>Sacramento County</b>   | <b>32,886</b>                   | <b>10,601</b>                             |
| Isleton                    | 77                              | 15  |
| Sacramento                 | 17,649                          | 4,954                                     |
| Unincorporated County      | 15,160                          | 5,632                                     |
| <b>San Joaquin County</b>  | <b>28,829</b>                   | <b>11,643</b>                             |
| Lathrop                    | 1,326                           | 433                                       |
| Stockton                   | 16,540                          | 7,304                                     |
| Tracy                      | 4,888                           | 1,539                                     |
| Unincorporated County      | 6,075                           | 2,367                                     |
| <b>Solano County</b>       | <b>1,318</b>                    | <b>431</b>                                |
| Rio Vista                  | 1,219                           | 389                                       |
| Unincorporated County      | 99                              | 42  |
| <b>Yolo County</b>         | <b>6,750</b>                    | <b>2,158</b>                              |
| West Sacramento            | 5,347                           | 1,741                                     |
| Unincorporated County      | 1,403                           | 417                                       |
| <b>TOTAL</b>               | <b>161,650</b>                  | <b>58,334</b>                             |

Sources: Association of Bay Area Governments, Sacramento Area Council of Governments, San Joaquin Council of Governments

## Federal Government

Although the federal government does not directly regulate land uses in the sense of designating specific land use or zoning categories and development standards, various federal laws and regulations, and the federal agencies assigned to implement those law and regulations, do influence local land use decisions. The primary federal agencies that could influence land use decisions in the Delta are the U. S. Environmental Protection Agency (USEPA), U.S. Army Corps of Engineers (USACE), and the U.S. Fish and Wildlife Service (USFWS).

## State Jurisdictional Responsibilities

California law delegates authority to directly regulate land uses to cities and counties subject to state planning laws, the California Environmental Quality Act (CEQA), and other state laws and agency regulations related to the protection of natural resources. While state and federal laws and regulations may

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influence local land use policies, zoning codes, and development permit decisions, only cities and counties adopt general plans and zoning ordinances regulating specific uses of land. Local government responsibilities are described earlier under “Statutory Requirements.”

Three state agencies that have significant influence over local land use decisions in the Delta are the DPC, the Council, and the San Francisco Bay Conservation and Development Commission (BCDC). In addition, various federal resource agencies have jurisdiction in the Delta related to their areas of responsibility.

Although the federal government does not directly regulate land uses in the sense of designating specific land use or zoning categories and development standards, various federal laws and regulations, and the federal agencies assigned to implement those law and regulations, do influence local land use decisions.

The primary federal agencies that could influence land use decisions in the Delta are the USEPA, USACE, and USFWS. Key laws and regulations within their areas of jurisdiction that relate to local land use decisions are summarized below.

The State of California requires cities and counties to regulate land uses through statutory authority granted by state planning and zoning laws described under “Statutory Requirements.” Other State laws and regulations can also affect local land use decisions. The primary State agencies that could influence land use decisions in the Delta include various departments of the California Environmental Protection Agency (Cal/EPA), the California Natural Resources Agency, the Central Valley Flood Protection Board, and the State Mining and Geology Board. In addition, the State Lands Commission (CSLC) has jurisdiction over lands connected to the State’s water bodies and coastlines and retains surface mineral rights over school lands. Table 1-2 summarizes major jurisdictional responsibilities within the Delta.

**Table 1-2**  
**Summary of Major Jurisdictional Responsibilities in the Delta**

| Agency                        | Summary Description  |
|-------------------------------|--|
| <b>Primary Delta Agencies</b> |  |
| Delta Protection Commission   | The DPC's mission is to adaptively protect, maintain, and where possible, enhance and restore the overall quality of the Delta environment consistent with the Delta Protection Act and the Land Use and Resource Management Plan for the Primary Zone. This includes agriculture, wildlife habitat, and recreational activities. The goal of the DPC is to ensure orderly, balanced conservation and development of Delta land resources and improved flood protection (DPC, 2007). The DPC is currently updating its Land Use and Resource Management Plan. The Plan, originally adopted in 1995, outlines the long-term land use requirements for the Delta.  |
| Delta Stewardship Council     | <p>The Council is charged with protecting the Delta and the critical role it serves in the water supply for millions of Californians and its unique ecosystem and way of life (Council, 2010). The Council must adopt and implement a comprehensive management plan (Delta Plan) for the Delta by January 1, 2012. This Delta Plan will guide state and local agencies to help achieve the coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The Delta Plan will also guide protection and enhancement of the unique resources, culture, and values of the Delta as an evolving place.</p> <p>The Council's legislative mandate and mission are focused on the preparation of the Delta Plan, an accompanying EIR to analyze the environmental consequences of the plan, and implementation strategies that will address the crisis in the Delta. Once adopted, the Delta Plan will be reviewed at least once every 5 years. (Council, 2010).</p> |



**Table 1-2**  
**Summary of Major Jurisdictional Responsibilities in the Delta**

| Agency  | Summary Description  |
|---|--|
| San Francisco Bay Conservation and Development Commission   | The BCDC is dedicated to the protection and enhancement of San Francisco Bay and Suisun Marsh and to the encouragement of their responsible use. The BCDC seeks to create a cleaner, healthier, vibrant bay that is more accessible to the public. The BCDC plays a critical role in bay governance, a role that complements the responsibilities and authorities of other public agencies involved in bay protection and development. BCDC has become an integral part of bay governance by recognizing that local governments, acting alone, cannot fully address regional issues and by providing an effective mechanism to focus state and federal laws and policies on a regional resource of national significance. (BCDC, 2007)   |
| Sacramento-San Joaquin Delta Conservancy Act                | <p>The Sacramento-San Joaquin Conservancy Act (Chapter 5, Statutes of 2009) created the Delta Conservancy to act as a primary state agency to implement ecosystem restoration in the Delta. The Conservancy also supports efforts that advance environmental protection and the economic well being of Delta residents, including the following:</p> <ul style="list-style-type: none"> <li>◆ Protect and enhance habitat and habitat restoration.</li> <li>◆ Protect and preserve Delta agriculture and working landscapes.</li> <li>◆ Provide increased opportunities for tourism and recreation.</li> <li>◆ Promote Delta legacy communities and economic vitality in the Delta in coordination with the Delta Protection Commission.</li> <li>◆ Increase the resilience of the Delta to the effects of natural disasters such as floods and earthquakes, in coordination with the Delta Protection Commission.</li> <li>◆ Protect and improve water quality.</li> <li>◆ Assist the Delta regional economy through the operation of the Conservancy's program.</li> <li>◆ Identify priority projects and initiatives for which funding is needed.</li> <li>◆ Protect, conserve, and restore the region's physical, agricultural, cultural, historical, and living resources.</li> <li>◆ Assist local entities in the implementation of their habitat conservation plans and natural community conservation plans.</li> <li>◆ Facilitate protection and safe harbor agreements under the federal Endangered Species Act of 1973 and the California Endangered Species Act for adjacent land owners and local public agencies.</li> <li>◆ Promote environmental education.</li> </ul> |
| <b>Federal</b>  |  |
| Clean Water Act (Section 404)                               | USEPA is the lead federal agency responsible for water quality management. The Clean Water Act of 1972 (CWA) is the primary federal law that governs and authorizes water-quality control activities by USEPA as well as the states. Various elements of the CWA address water quality, as discussed below.  |
| Rivers and Harbors Act of 1899 (Section 408 and Section 10) | Under Section 14 of the Rivers and Harbors Act of 1899 (33 United States Code [USC] 408), referred to as "Section 408," the Secretary of the Army, on the recommendation of the Chief of Engineers, may grant permission for the alteration of the federal levee system by a non-federal entity if the alteration would not be injurious to the public.  |

**Table 1-2**  
**Summary of Major Jurisdictional Responsibilities in the Delta**

| <b>Agency</b>  | <b>Summary Description</b>   |
|--|--|
| Fish and Wildlife Coordination Act of 1934, as Amended                     | The Fish and Wildlife Coordination Act (FWCA) ensures that fish and wildlife receive consideration equal to that of other project features for projects that are constructed, licensed, or permitted by Federal agencies. The FWCA requires that the views of the USFWS, National Marine Fisheries Service (NMFS), and the applicable state fish and wildlife agency (in this case, the California Department of Fish and Game [DFG]) be considered when impacts are evaluated and mitigation needs determined.  |
| Endangered Species Act of 1973, as Amended                                 | Pursuant to the federal Endangered Species Act (ESA), USFWS and NMFS have regulatory authority over federally listed species. Under ESA, a permit to “take” a listed species is required for any federal action that may harm an individual of that species.   |
| Migratory Bird Treaty Act of 1918  | The Migratory Bird Treaty Act (MBTA) implements a series of international treaties that provide for migratory bird protection. The MBTA authorizes the Secretary of the Interior to regulate the take of migratory birds.  |
| National Historic Preservation Act of 1966, as Amended                     | Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 Code of Federal Regulations [CFR] 800, as amended in 2004) require federal agencies to consider the potential effects of their proposed undertakings on historic properties.   |
| <b>State of California</b>   |  |
| California State Lands Commission  | The CSLC was created in 1938 to manage and protect the important natural and cultural resources on certain public lands within the state and the public’s rights to access these lands. Public lands under CSLC jurisdiction are sovereign and school lands. Sovereign lands (about 4 million acres) include the beds of California’s naturally navigable rivers, lakes, and streams, as well as the State’s tide and submerged lands along the state’s more than 1,100 miles of coastline, extending from the shoreline out to 3 miles offshore. Within the Delta, CSLC’s jurisdiction extends to all rivers, sloughs, and other natural water bodies. (CSLC, 2010) |
| Central Valley Flood Protection Board Encroachment Permit                  | The California Central Valley Flood Protection Board (formerly The Reclamation Board) requires an encroachment permit for any non-federal activity along or near federal flood control project levees and floodways or in Board-designated floodways to ensure that proposed local actions or projects do not impair the integrity of existing flood control systems to withstand flood conditions.  |
| California Surface Mining and Reclamation Act                              | The California Surface Mining and Reclamation Act of 1975 (PRC Section 2710 et seq.) (SMARA) addresses surface mining of minerals and requires mitigation to reduce adverse impacts on public health, property, and the environment.   |
| Clean Water Act (Section 401)  | The State Water Resources Control Board (SWRCB) and its nine regional water quality control boards (RWQCBs) are responsible for identifying beneficial uses and adopting applicable water quality objectives.  |
| Porter-Cologne Water Quality Control Act and Clean Water Act (Section 402) | Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. In California, USEPA has delegated responsibility to the SWRCB. The SWRCB and RWQCBs regulate discharges of waste into waters of the state through National Pollutant Discharge Elimination System (NPDES) permits, authorized under Section 402 of the CWA. Pursuant to the California Endangered Species Act (CESA), a permit from DFG is required for projects that could result in the take of a plant or animal species that is State listed as threatened or endangered.  |
| California Fish and Game Code Section 1602—Streambed Alteration Agreement  | All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by DFG under Section 1602 of the California Fish and Game Code.   |

**Table 1-2**  
**Summary of Major Jurisdictional Responsibilities in the Delta**

| Agency  | Summary Description   |
|---|---|
| California Fish and Game Code Sections 3503 and 3503.5—Protection of Bird Nests and Raptors | Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird.  |
| California Fish and Game Code—Fully Protected Species                                       | Protection of fully protected species is described in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species and do not provide for authorization of incidental take of fully protected species.   |
| California Register of Historic Places  | The California Register of Historic Resources (CRHR) includes resources that are listed in or formally determined eligible for listing in the National Register of Historic Places (NRHP), as well as some California State Landmarks and Points of Historical Interest (PRC Section 5024.1, 14 California Code of Regulations [CCR] Section 4850).   |
| <b>Reclamation</b>  |   |
| Reclamation Districts   | <p>Reclamation districts were created by acts of the Legislature, mostly in the early 1900s, to allow land to be used for agriculture. These districts are public entities within California's Central Valley responsible for managing and maintaining the levees, freshwater channels, or sloughs, canals, pumps, and other flood protection structures. Reclamation districts are formed under State law to allow property owners to tax themselves to build and maintain levees for reclamation and flood control purposes. Each is run autonomously by an elected board. There are 111 reclamation districts in the Delta.</p> <p>Historically, reclamation districts were involved in "reclaiming" wetland areas for agriculture. Land reclamation was usually accomplished by the introduction of levee systems along with other flood control mechanisms to prevent flooding in wetland areas. "Project levees" built by the USACE were designed to provide superior flood control protection. Once completed, the general upkeep was turned over to local entities.</p> |





## Section 2

# History of Land Use Change in the Delta

This section provides a brief history of land use changes in the Delta that have led to the current communities, plans, policies, and issues in the Delta.

The initial reports of rich gold strikes in California starting in 1849 triggered the Gold Rush that turned the Delta region into a series of busy transportation routes bringing would-be miners and supplies to jumping-off points. By the early 1850s, many would-be miners initially realized that gold was hard to find and that providing supplies to the mines and food to nearby San Francisco was highly lucrative. As a result, vegetable, meat, and tallow trades boomed in the Delta and Central Valley, and family farms and labor camps grew into small agricultural communities.

The natural marshy islands of the Delta were reclaimed in the late 19th and early 20th centuries through levee construction and marsh drainage, dramatically altering the natural landscape and forming the network of Delta islands and channels of today. The early focus on reclaiming “swamp and overflow” lands was granted to the State under the federal Swamp and Overflow Lands Act of 1850. To help local landowners reclaim swamp and overflow lands, the State adopted a series of statutes authorizing them to form local reclamation districts. In this way, reclamation, flood management, and levee construction and

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1 maintenance in the Delta were carried out in a more or less piecemeal fashion at the local level for several  
2 decades. In less than 100 years, from 1850 to 1930, hundreds of thousands of acres of land went into  
3 agricultural production due in large part to the highly productive peat soils of the Delta, the introduction  
4 of mechanical farm equipment, and federal policies encouraging land reclamation. The growth of the  
5 agricultural industry in the Delta was steady and, by 1852, the banks of the San Joaquin River were  
6 entirely occupied by small-scale farming operations. By 1883, large tonnages of garden vegetables were  
7 being shipped to San Francisco, with a day's harvest picked up by steamers that landed at San Francisco  
8 the morning after harvest from nearby fields and orchards. In the early 1900s, field corn, sugar beets,  
9 celery, and onions were being grown in the San Joaquin region, and asparagus and sugar beets became  
10 more prevalent in the Sacramento River districts of the Delta. Over the next 50 years, the Delta asparagus  
11 crop represented approximately half of the nation's production (Thompson, 1957).

12 The development and improvement of transportation infrastructure played a key role in the growth of the  
13 Delta. The ability to transport goods and people by rail, roads, and river was instrumental to the  
14 establishment of towns and the ultimate economic success of the area. Railroads were important in the  
15 creation and economic success of many Delta towns. As early as 1895, the need for road improvements  
16 led to the creation of the Bureau of Highways. The advent of the automobile in the early 20th century, as  
17 well as continued growth in the region, led to the constant creation and improvement of Delta  
18 thoroughfares. Over time, the Delta's location between population centers and its terrain have made it  
19 valuable as a utility and transportation corridor.

20 By 1900, the five Delta counties had a combined population of 137,174, and by 1950 the population had  
21 grown to 933,000 (U.S. Census Bureau). Growth and demand for resources brought changes to Delta  
22 lands. As agriculture and population expanded in the Delta and throughout California, increasing numbers  
23 of levees, dams, diversions, and water conveyance facilities were constructed in the Delta and upstream.  
24 These facilities altered the flow of fresh water and natural flooding and inundation patterns from the  
25 Sacramento and San Joaquin rivers and other natural waterways through the Delta and into Suisun and  
26 Grizzly bays. This change in water flow, in turn, increased the frequency of salinity intrusion in the Delta,  
27 affecting agriculture and the Delta environment as a whole. Flood control became more organized and  
28 effective following the implementation of the Sacramento River Flood Control Project, which included  
29 construction of levees, weirs, and bypasses along the river to channel floodwaters away from population  
30 centers.

31 Until the 1970s, population centers in the Delta were primarily limited to historic town sites near  
32 industrial centers. The past 40 years have seen rapid development within the Delta—new communities in  
33 unincorporated county areas (such as Discovery Bay), rapid growth of historic cities (such as Brentwood  
34 and Oakley) along State Route (SR) 4, and growth of Central Valley cities (such as Sacramento, Stockton,  
35 and Lathrop) into the Delta. Rapid urbanization associated with substantial population growth increased  
36 the demand for developable land, particularly in areas near the Bay Area, Stockton, and Sacramento. This  
37 demand has resulted in the conversion of open space, primarily agricultural land, to residential and  
38 commercial uses, greatly reducing the buffers between agriculture and developed areas along the  
39 periphery of the Delta. Between 1990 and 2004, approximately 39,000 acres of agricultural land was  
40 converted to urban and other uses in the larger Delta-Suisun Marsh area.

41 Today, agriculture is the dominant land use of the Delta, comprising three-quarters of the region's  
42 landscape. It was for agriculture that reclamation of the Delta's lowlands began in the 1850s with the  
43 support of state funding and policies. Because of the fertile peat soils and the moderating marine  
44 influence, Delta agriculture's per-acre yields are almost 50 percent higher than the state's average. This  
45 unique growing region supports a diverse array of crops from such high value commodities as pears, wine  
46 grapes, asparagus, turf-grass, cherries, tomatoes and blueberries, to lower risk and value field crops as  
47 corn, hay, small grains and pasture. Between 1998 and 2004, the average gross agricultural output from  
48 the six Delta counties was calculated by DWR to be \$654,766,017 (2004 dollars). This compares to a total

36 statewide farmgate sales of nearly \$32 billion in the same time period, or about 2 percent of the state's total production value. This is a small percentage, but if the Delta were a county, it would rank 15th out of the state's 58 counties in agricultural production value, just behind Santa Barbara County, and ahead of 40 Sonoma County. (Trott, 2010)

Agriculture is the principal land use in the Delta. However, the total acreage in agricultural lands has declined since 1984, from about 597,398 to 531,009 acres in 2008. Since 1984, the percent of agricultural land in the Delta has decreased from about 80 percent of the Delta's total land area to about 74 percent in 2008. About 75 percent is classified as Prime Farmland, land with the best physical and chemical characteristics and reliable irrigation water. By comparison, only 18 percent of the state's agricultural land is classified as Prime Farmland. Urban uses comprised seven percent of the legal Delta's land area in 1984, increasing to just under 10 percent in 2008. Water and non-agricultural open space uses balance out the Delta's landscape. (Trott, 2010, and FMMP)

Land use changes in the Delta can be seen when analyzing the historical designation of important farmlands in the Delta over a longer period of time. In 1984, there were approximately 564,159 acres of important farmland in the legal Delta. In 2008, there were approximately 503,922 acres of important farmland in the legal Delta. Between 1984 and 2008, approximately 60,237 acres of prime, statewide importance, local importance, potential local importance, and unique farmland has been lost to urban development in the legal Delta (see Tables 2-1 and 2-2).

**Table 2-1**  
**Delta Farmland in 1984 (By County)**

| <b>Farmland Type</b>                   | <b>Total Acres*</b> | <b>Primary Acres</b> | <b>Secondary Acres</b> | <b>Legal Delta Acres</b> |
|--|---------------------|----------------------|------------------------|--------------------------|
| <b>Alameda County</b>                  |                     |                      |                        |                          |
| Urban and Built-Up Land                | 126,841             | 0                    | 65                     | 65                       |
| Grazing Land                           | 257,238             | 0                    | 1,219                  | 1,219                    |
| Farmland of Local Importance           | 0                   | 0                    | 0                      | 0                        |
| Farmland of Potential Local Importance | 0                   | 0                    | 0                      | 0                        |
| Prime Farmland                         | 9,809               | 0                    | 2,613                  | 2,613                    |
| Farmland of Statewide Importance       | 1,870               | 0                    | 256                    | 256                      |
| Unique Farmland                        | 1,190               | 0                    | 73                     | 73                       |
| Water                                  | 52,776              | 0                    | 0                      | 0                        |
| Other Land                             | 75,615              | 0                    | 419                    | 419                      |
| <b>Contra Costa County</b>             |                     |                      |                        |                          |
| Urban and Built-Up Land                | 126,841             | 374                  | 16,703                 | 17,077                   |
| Grazing Land                           | 257,238             | 0                    | 888                    | 888                      |
| Farmland of Local Importance           | 0                   | 1,374                | 4,541                  | 5,915                    |
| Farmland of Potential Local Importance | 0                   | 0                    | 0                      | 0.00                     |
| Prime Farmland                         | 9,809               | 15,265               | 24,533                 | 39,799                   |
| Farmland of Statewide Importance       | 1,870               | 6,229                | 9,300                  | 15,529                   |
| Unique Farmland                        | 1,190               | 2,078                | 5,927                  | 8,005                    |
| Water                                  | 52,776              | 18,229               | 1,350                  | 19,579                   |
| Other Land                             | 75,615              | 2,325                | 3,413                  | 5,738                    |
| <b>Sacramento County</b>               |                     |                      |                        |                          |
| Urban and Built-Up Land                | 131,321             | 438                  | 4,875                  | 5,313                    |
| Grazing Land                           | 176,777             | 2,395                | 1,058                  | 3,454                    |

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**Table 2-1**  
**Delta Farmland in 1984 (By County)**

| <b>Farmland Type</b>                   | <b>Total Acres*</b> | <b>Primary Acres</b> | <b>Secondary Acres</b> | <b>Legal Delta Acres</b> |
|--|---------------------|----------------------|------------------------|--------------------------|
| Farmland of Local Importance           | 31,821              | 1,062                | 799                    | 1,861                    |
| Farmland of Potential Local Importance | 0                   | 0                    | 0                      | 0                        |
| Prime Farmland                         | 124,415             | 68,379               | 8,817                  | 77,196                   |
| Farmland of Statewide Importance       | 79,822              | 739                  | 3,928                  | 4,668                    |
| Unique Farmland                        | 12,082              | 5,152                | 1,435                  | 6,587                    |
| Water                                  | 18,695              | 12,511               | 1,499                  | 14,010                   |
| Other Land                             | 61,150              | 4,857                | 520                    | 5,377                    |
| <b>San Joaquin County</b>              |                     |                      |                        |                          |
| Urban and Built-Up Land                | 63,777              | 1,001                | 22,615                 | 23,616                   |
| Grazing Land                           | 157,874             | 92                   | 387                    | 480                      |
| Farmland of Local Importance           | 53,145              | 1,139                | 3,686                  | 4,825                    |
| Farmland of Potential Local Importance | 0                   | 0                    | 0                      | 0                        |
| Prime Farmland                         | 437,859             | 155,039              | 80,066                 | 235,105                  |
| Farmland of Statewide Importance       | 100,277             | 6,731                | 10,149                 | 16,880                   |
| Unique Farmland                        | 46,863              | 2,906                | 6,074                  | 8,980                    |
| Water                                  | 10,187              | 7,664                | 716                    | 8,380                    |
| Other Land                             | 42,618              | 13,327               | 5,865                  | 19,193                   |
| <b>Solano County</b>                   |                     |                      |                        |                          |
| Urban and Built-Up Land                | 40,171              | 90                   | 4                      | 94                       |
| Grazing Land                           | 220,142             | 12,770               | 4,082                  | 16,852                   |
| Farmland of Local Importance           | 0                   | 0                    | 0                      | 0                        |
| Farmland of Potential Local Importance | 0                   | 0                    | 0                      | 0                        |
| Prime Farmland                         | 152,225             | 51,864               | 0                      | 51,864                   |
| Farmland of Statewide Importance       | 12,620              | 8,795                | 0                      | 8,795                    |
| Unique Farmland                        | 16,112              | 2,487                | 0                      | 2,487                    |
| Water                                  | 50,612              | 9,392                | 795                    | 10,187                   |
| Other Land                             | 90,489              | 817                  | 1,426                  | 2,243                    |
| <b>Yolo County</b>                     |                     |                      |                        |                          |
| Urban and Built-Up Land                | 20,855              | 228                  | 4,429                  | 4,656                    |
| Grazing Land                           | 121,876             | 6,527                | 0                      | 6,527                    |
| Farmland of Local Importance           | 91,604              | 5,000                | 1,586                  | 6,585                    |
| Farmland of Potential Local Importance | 2,721               | 0                    | 16                     | 16                       |
| Prime Farmland                         | 272,952             | 34,595               | 4,685                  | 39,280                   |
| Farmland of Statewide Importance       | 23,758              | 8,076                | 2,027                  | 10,103                   |
| Unique Farmland                        | 56,883              | 14,553               | 2,188                  | 16,741                   |
| Water                                  | 6,913               | 2,339                | 1,415                  | 3,754                    |
| Other Land                             | 55,890              | 3,420                | 972                    | 4,392                    |

Source: California Farmland Mapping and Monitoring Program (FMMP), 1984  
Note: All acreages rounded to nearest whole number.



**Table 2-2**  
**Delta Farmland in 2008 (By County)**

| <b>Farmland Type</b>                        | <b>Total Acres</b> | <b>Primary Acres</b> | <b>Secondary Acres</b> | <b>Legal Delta Acres</b> |
|---|--------------------|----------------------|------------------------|--------------------------|
| <b>Alameda County</b>                       |                    |                      |                        |                          |
| Confined Animal Agriculture                 | 0                  | 0                    | 0                      | 0                        |
| Urban and Built-Up Land                     | 146,076            | 0                    | 147                    | 147                      |
| Grazing Land                                | 244,251            | 0                    | 1,862                  | 1,862                    |
| Farmland of Local Importance                | 0                  | 0                    | 0                      | 0                        |
| Farmland of Potential Local Importance      | 0                  | 0                    | 0                      | 0                        |
| Prime Farmland                              | 3,958              | 0                    | 2,073                  | 2,073                    |
| Rural Residential Land                      | 0                  | 0                    | 0                      | 0                        |
| Farmland of Statewide Importance            | 1,290              | 0                    | 75                     | 75                       |
| Unique Farmland                             | 2,442              | 0                    | 99                     | 99                       |
| Vacant or Disturbed Land                    | 0                  | 0                    | 0                      | 0                        |
| Water                                       | 53,780             | 0                    | 0                      | 0                        |
| Other Land                                  | 73,522             | 0                    | 389                    | 389                      |
| Nonagricultural or Natural Vegetation       | 0                  | 0                    | 0                      | 0                        |
| Semi-Agricultural and Rural Commercial Land | 0                  | 0                    | 0                      | 0                        |
| <b>Contra Costa County</b>                  |                    |                      |                        |                          |
| Confined Animal Agriculture                 | 0                  | 0                    | 0                      | 0                        |
| Urban and Built-Up Land                     | 151,337            | 500                  | 27,326                 | 27,826                   |
| Grazing Land                                | 168,905            | 201                  | 2,007                  | 2,208                    |
| Farmland of Local Importance                | 53,450             | 10,792               | 9,499                  | 20,291                   |
| Farmland of Potential Local Importance      | 0                  | 0                    | 0                      | 0                        |
| Prime Farmland                              | 26,789             | 10,991               | 15,028                 | 26,019                   |
| Rural Residential Land                      | 0                  | 0                    | 0                      | 0                        |
| Farmland of Statewide Importance            | 7,555              | 3,190                | 4,344                  | 7,533                    |
| Unique Farmland                             | 3,123              | 931                  | 1,766                  | 2,697                    |
| Vacant or Disturbed Land                    | 0                  | 0                    | 0                      | 0                        |
| Water                                       | 53,764             | 16,437               | 1,192                  | 17,629                   |
| Other Land                                  | 49,097             | 2,831                | 5,494                  | 8,325                    |
| Nonagricultural or Natural Vegetation       | 0                  | 0                    | 0                      | 0                        |
| Semi-Agricultural and Rural Commercial Land | 0                  | 0                    | 0                      | 0                        |
| <b>Sacramento County</b>                    |                    |                      |                        |                          |
| Confined Animal Agriculture                 | 0                  | 0                    | 0                      | 0                        |
| Urban and Built-Up Land                     | 177,915            | 1,105                | 5,679                  | 6,784                    |
| Grazing Land                                | 156,145            | 2,747                | 194                    | 2,941                    |
| Farmland of Local Importance                | 43,819             | 6,272                | 1,249                  | 7,521                    |
| Farmland of Potential Local Importance      | 0                  | 0                    | 0                      | 0                        |
| Prime Farmland                              | 104,367            | 62,429               | 7,571                  | 70,000                   |
| Rural Residential Land                      | 0                  | 0                    | 0                      | 0                        |
| Farmland of Statewide Importance            | 49,470             | 771                  | 3,058                  | 3,828                    |
| Unique Farmland                             | 15,463             | 4,230                | 622                    | 4,852                    |

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**Table 2-2**  
**Delta Farmland in 2008 (By County)**

| <b>Farmland Type</b>                        | <b>Total Acres</b> | <b>Primary Acres</b> | <b>Secondary Acres</b> | <b>Legal Delta Acres</b> |
|---|--------------------|----------------------|------------------------|--------------------------|
| Vacant or Disturbed Land                    | 0                  | 0                    | 0                      | 0                        |
| Water                                       | 18,147             | 12,433               | 1,396                  | 13,829                   |
| Other Land                                  | 70,757             | 5,547                | 3,164                  | 8,711                    |
| Nonagricultural or Natural Vegetation       | 0                  | 0                    | 0                      | 0                        |
| Semi-Agricultural and Rural Commercial Land | 0                  | 0                    | 0                      | 0                        |
| <b>San Joaquin County</b>                   |                    |                      |                        |                          |
| Confined Animal Agriculture                 | 5,552              | 201                  | 1,343                  | 1,544                    |
| Urban and Built-Up Land                     | 90,530             | 1,176                | 32,834                 | 34,010                   |
| Grazing Land                                | 142,461            | 108                  | 335                    | 443                      |
| Farmland of Local Importance                | 60,236             | 5,250                | 6,335                  | 11,585                   |
| Farmland of Potential Local Importance      | 0                  | 0                    | 0                      | 0                        |
| Prime Farmland                              | 396,985            | 149,485              | 65,890                 | 215,374                  |
| Rural Residential Land                      | 14,582             | 129                  | 1,274                  | 1,404                    |
| Farmland of Statewide Importance            | 86,298             | 6,353                | 7,807                  | 14,159                   |
| Unique Farmland                             | 66,622             | 3,391                | 6,045                  | 9,436                    |
| Vacant or Disturbed Land                    | 10,372             | 683                  | 2,812                  | 3,495                    |
| Water                                       | 11,773             | 9,029                | 959                    | 9,988                    |
| Other Land                                  | 0                  | 0                    | 0                      | 0                        |
| Nonagricultural or Natural Vegetation       | 23,140             | 11,205               | 3,213                  | 14,417                   |
| Semi-Agricultural and Rural Commercial Land | 4,048              | 889                  | 712                    | 1,601                    |
| <b>Solano County</b>                        |                    |                      |                        |                          |
| Confined Animal Agriculture                 | 0                  | 0                    | 0                      | 0                        |
| Urban and Built-Up Land                     | 59,157             | 382                  | 52                     | 435                      |
| Grazing Land                                | 204,519            | 14,477               | 3,704                  | 18,182                   |
| Farmland of Local Importance                | 0                  | 0                    | 0                      | 0                        |
| Farmland of Potential Local Importance      | 0                  | 0                    | 0                      | 0                        |
| Prime Farmland                              | 135,734            | 47,472               | 0                      | 47,472                   |
| Rural Residential Land                      | 0                  | 0                    | 0                      | 0                        |
| Farmland of Statewide Importance            | 7,039              | 4,503                | 0                      | 4,503                    |
| Unique Farmland                             | 10,525             | 1,173                | 0                      | 1,173                    |
| Vacant or Disturbed Land                    | 0                  | 0                    | 0                      | 0                        |
| Water                                       | 53,311             | 12,093               | 796                    | 12,889                   |
| Other Land                                  | 112,087            | 6,115                | 1,755                  | 7,870                    |
| Nonagricultural or Natural Vegetation       | 0                  | 0                    | 0                      | 0                        |
| Semi-Agricultural and Rural Commercial Land | 0                  | 0                    | 0                      | 0                        |
| <b>Yolo County</b>                          |                    |                      |                        |                          |
| Confined Animal Agriculture                 | 0                  | 0                    | 0                      | 0                        |
| Urban and Built-Up Land                     | 30,225             | 267                  | 6,364                  | 6,631                    |
| Grazing Land                                | 157,961            | 11,454               | 40                     | 11,493                   |
| Farmland of Local Importance                | 34,000             | 643                  | 798                    | 1,441                    |

**Table 2-2**  
**Delta Farmland in 2008 (By County)**

| <b>Farmland Type</b>                        | <b>Total Acres</b> | <b>Primary Acres</b> | <b>Secondary Acres</b> | <b>Legal Delta Acres</b> |
|---|--------------------|----------------------|------------------------|--------------------------|
| Farmland of Potential Local Importance      | 26,345             | 1,925                | 1,558                  | 3,483                    |
| Prime Farmland                              | 255,194            | 32,941               | 2,297                  | 35,238                   |
| Rural Residential Land                      | 0                  | 0                    | 0                      | 0                        |
| Farmland of Statewide Importance            | 16,793             | 3,415                | 221                    | 3,636                    |
| Unique Farmland                             | 45,750             | 9,801                | 1,633                  | 11,434                   |
| Vacant or Disturbed Land                    | 0                  | 0                    | 0                      | 0                        |
| Water                                       | 7,814              | 2,877                | 1,274                  | 4,151                    |
| Other Land                                  | 79,371             | 11,415               | 3,132                  | 14,548                   |
| Nonagricultural or Natural Vegetation       | 0                  | 0                    | 0                      | 0                        |
| Semi-Agricultural and Rural Commercial Land | 0                  | 0                    | 0                      | 0                        |

Source: FMMP, 2008

Note: All acreages rounded to nearest whole number.

An illustration of how land use patterns have changed over time can be seen in Figures 2-1 and 2-2. As shown, the amount of urban land on the periphery of the Delta near Oakley, Brentwood, Tracy, and Lathrop increased noticeably from 1984 to 2008.

Indicative of the changing trends in important farmland designations, the amount of land under Williamson Act contracts has also decreased as the amount of designated important farmland has decreased in the Delta. In 2009, there were approximately 366,840 acres of land under Williamson Act contracts (see Table 2-3). Williamson Act lands are shown graphically in Figure 2-3.

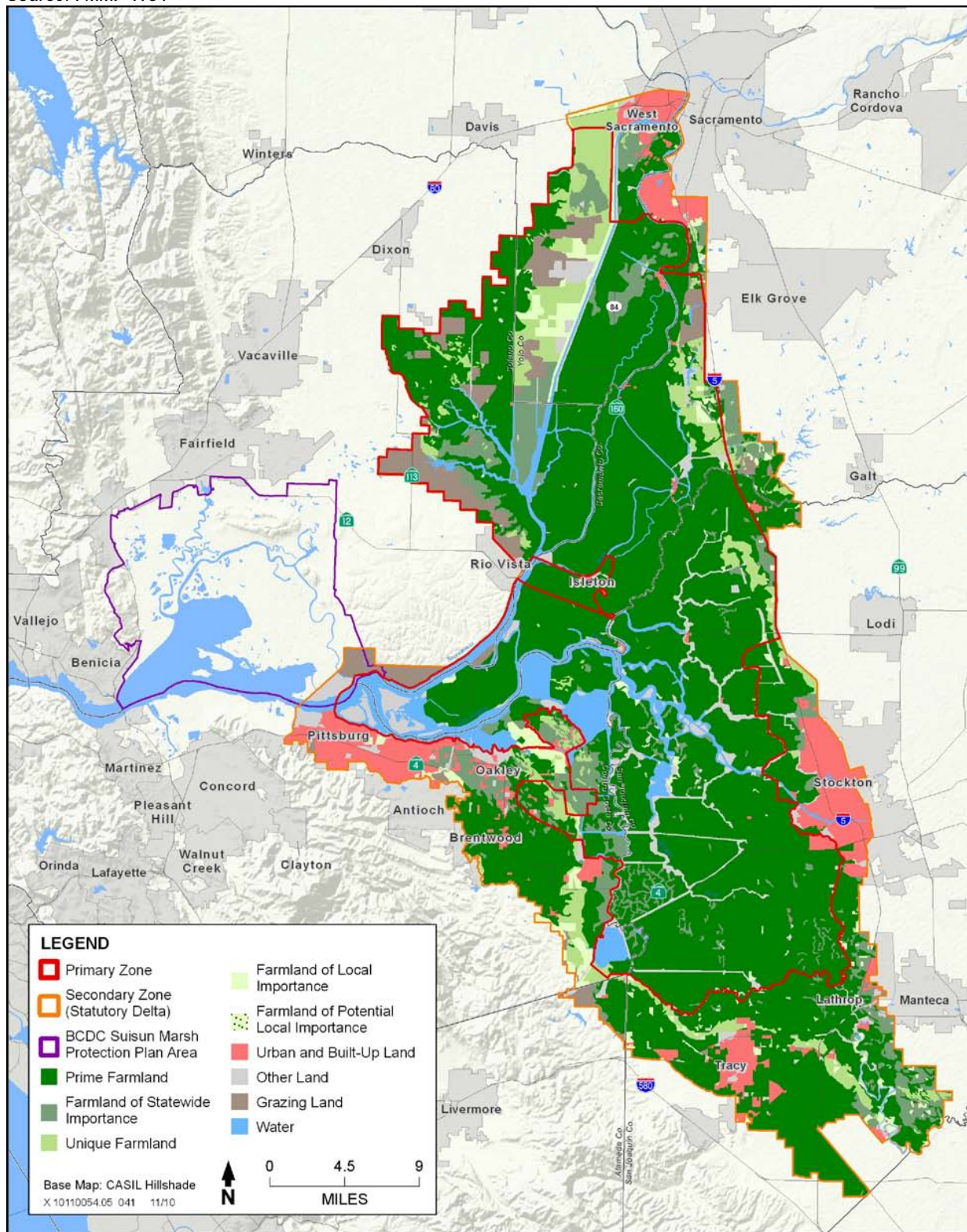
The Delta's water-based ecosystem has been further impacted by the conversion of farmland and natural habitat to urban uses along the edges of the Delta (beginning mostly in the Secondary Zone) due to urban expansion within the Sacramento, Stockton, and northern east Bay regions (Antioch, Brentwood, and Oakley). In 2010, the five Delta counties had a combined population of over 3.8 million (California Department of Finance 2010).

Urban expansion at the edges of the Delta and the development of transportation infrastructure and corridors through the Delta connecting neighboring cities have driven the growth of recreation and tourism in the Delta. Today, the Delta provides opportunities for boating, fishing, hunting, hiking, biking, camping, wildlife viewing, agri-tourism, and sightseeing. Numerous campgrounds, marinas, recreational vehicle parks, and vacation homes in the Delta now support these uses. As the Delta's agricultural economy has been affected by development and land use policies, the importance of recreation and tourism to the region's economy has increased, along with the need to protect these uses from stressors and threats.

SECTION 2  
HISTORY OF LAND USE CHANGE IN THE DELTA

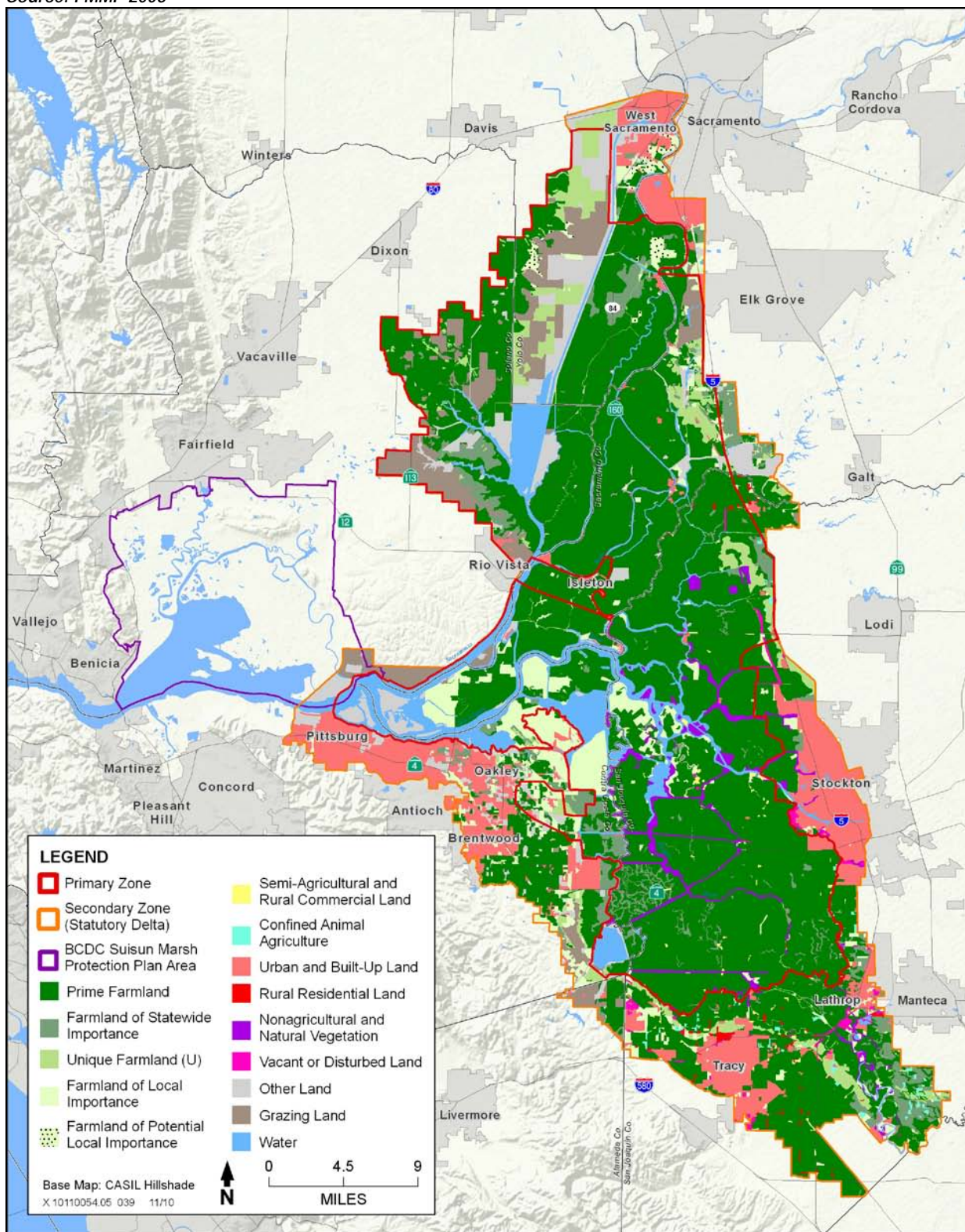
DELTA AS A PLACE: LAND USE WHITE PAPER

**Figure 2-1**  
**Delta Farmland in 1984**  
*Source: FMMP 1984*





1 **Figure 2-2**  
2 **Delta Farmland in 2008**  
3 **Source: FMMP 2008**



4



**Figure 2-3**  
Delta Williamson Act Lands in 2009  
*Source: California Department of Conservation, 2009*

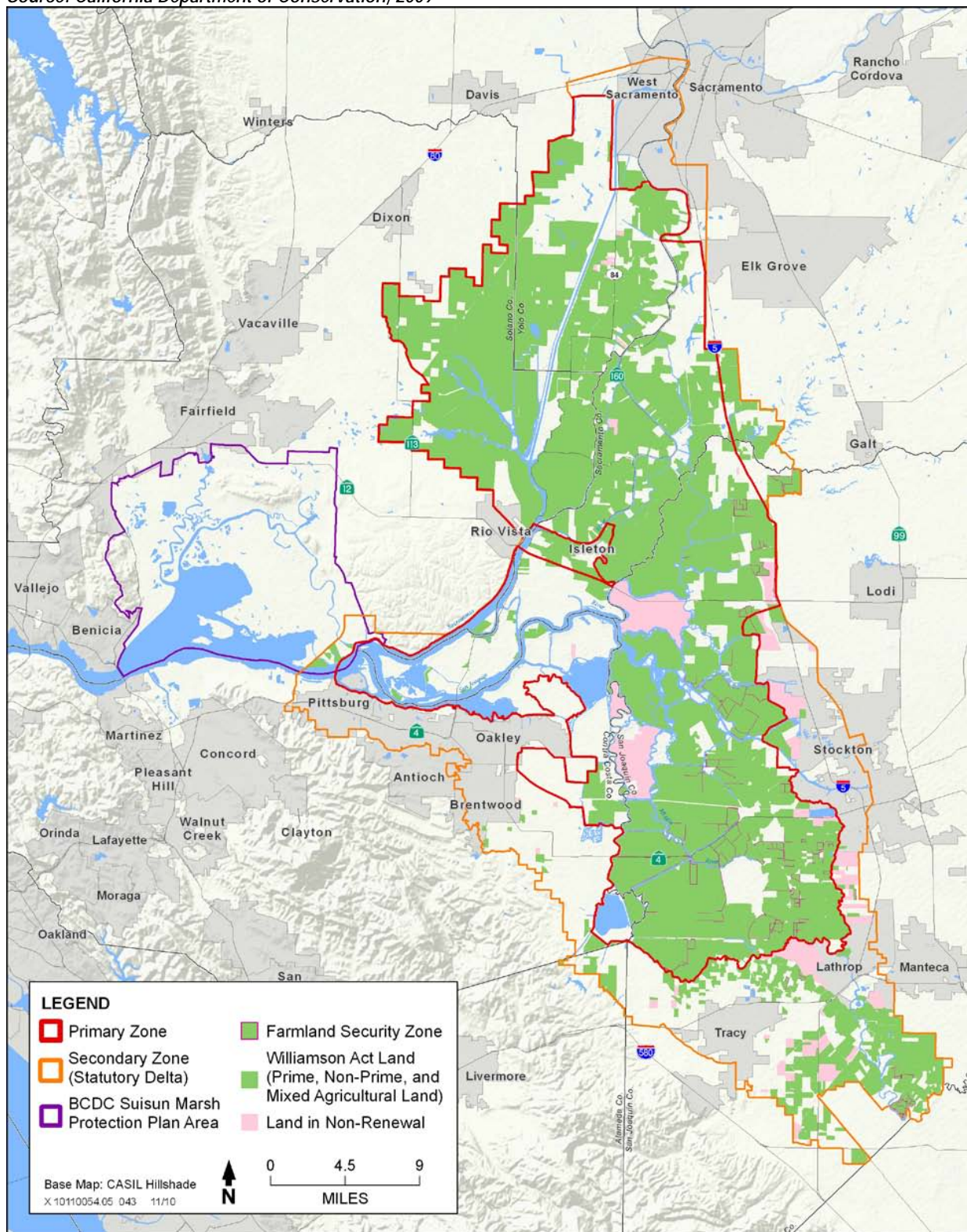


Table 2-3

Delta Williamson Act Lands in 2009

| <b>Williamson Act Contract Land</b>   | <b>Total Acres</b> | <b>Primary Acres</b> | <b>Secondary Acres</b> | <b>Legal Delta Acres</b> |
|---------------------------------------|--------------------|----------------------|------------------------|--------------------------|
| <b>Alameda County</b>                 |                    |                      |                        |                          |
| Non-Prime Ag Land                     | 138,582            | 0                    | 1,285                  | 1,285                    |
| Non-Prime Non-Renewal Ag Land         | 1,644              | 0                    | 0                      | 0                        |
| Prime Ag Land                         | 3,227              | 0                    | 0                      | 0                        |
| Prime Non-Renewal Ag Land             | 3                  | 0                    | 0                      | 0                        |
| <b>Contra Costa County</b>            |                    |                      |                        |                          |
| Non-Prime Ag Land                     | 38,587             | 429                  | 530                    | 959                      |
| Non-Prime Non-Renewal Ag Land         | 3,465              | 0                    | 0                      | 0                        |
| Prime Ag Land                         | 5,167              | 3,748                | 746                    | 4,494                    |
| Prime Non-Renewal Ag Land             | 1,088              | 925                  | 132                    | 1,058                    |
| <b>Sacramento County</b>              |                    |                      |                        |                          |
| Non-Prime Ag Land                     | 84,895             | 544                  | 912                    | 1,456                    |
| Non-Prime Non-Renewal Ag Land         | 6,441              | 0                    | 0                      | 0                        |
| Prime Ag Land                         | 91,147             | 43,778               | 7,813                  | 51,591                   |
| Prime Non-Renewal Ag Land             | 3,968              | 275                  | 0                      | 275                      |
| Mixed Prime and Non-Prime             | 1,035              | 818                  | 0                      | 818                      |
| Home Site                             | 109                | 44                   | 2                      | 46                       |
| <b>San Joaquin County</b>             |                    |                      |                        |                          |
| Farmland Security Zone                | 62,981             | 29,511               | 2,533                  | 32,044                   |
| Mixed Prime and Non-Prime             | 429,874            | 106,445              | 30,013                 | 136,458                  |
| Mixed Prime Non-Renewal               | 47,539             | 12,150               | 11,564                 | 23,714                   |
| <b>Solano County</b>                  |                    |                      |                        |                          |
| Non-Prime Ag Land                     | 142,109            | 11,611               | 714                    | 12,325                   |
| Non-Prime Non-Renewal Ag Land         | 1,737              | 0                    | 0                      | 0                        |
| Non-Prime Ag Conservation Easement    | 2,760              | 0                    | 0                      | 0                        |
| Prime Ag Land                         | 112,576            | 50,512               | 0                      | 50,512                   |
| Prime Non-Renewal Ag Land             | 1,196              | 0                    | 0                      | 0                        |
| Prime Ag Conservation Easement        | 733                | 0                    | 0                      | 0                        |
| Mixed Prime and Non-Prime             | 8,926              | 5,314                | 0                      | 5,314                    |
| Mixed Prime and Non-Prime Non-Renewal | 107                | 0                    | 0                      | 0                        |
| Mixed Ag Conservation Easement        | 773                | 0                    | 0                      | 0                        |

**Table 2-3**  
Delta Williamson Act Lands in 2009

| <b>Williamson Act Contract Land</b> | <b>Total Acres</b> | <b>Primary Acres</b> | <b>Secondary Acres</b> | <b>Legal Delta Acres</b> |
|-------------------------------------|--------------------|----------------------|------------------------|--------------------------|
| <b>Yolo County</b>                  |                    |                      |                        |                          |
| Non-Prime Ag Land                   | 151,556            | 1,846                | 0                      | 1,846                    |
| Non-Prime Non-Renewal Ag Land       | 3,081              | 4                    | 0                      | 4                        |
| Prime Ag Land                       | 239,316            | 40,445               | 1,172                  | 41,616                   |
| Prime Non-Renewal Ag Land           | 9,291              | 510                  | 0                      | 510                      |
| Mixed Prime and Non-Prime           | 4,453              | 516                  | 0                      | 516                      |

Data Source: California Dept of Conservation, 2009

Note: All acreages rounded to nearest whole number.





## Section 3

# Delta Communities and Economic Drivers

This section is intended to describe the Delta today. Population and infrastructure is described for the Delta as a whole, followed by brief characterizations of several Delta communities. Economic drivers include agriculture, industry, and recreation and tourism.

## Population and Trends

In 2000, the total population within the five Delta counties was approximately 3.3 million (see Table 3-1). The California Department of Finance estimates that the combined population of the Delta counties will grow from about 3.3 million in 2000 to about 7.7 million in 2050, an increase of more than 130 percent (DWR, 2007). Based on U.S. Census block group-level data, the population within the Secondary and Primary Zones in 2000 was approximately 501,100 and 79,700, respectively (U.S. Census Bureau, 2000). In addition, the population on Delta Islands and tracts was approximately 26,000 in 2000, and is expected to grow to about 67,000 in 2030. Although this is significant growth, most of the future population growth in the Delta will occur outside the islands and tracts (DWR, 2007). For the 8-year period between 2000 and 2008, the combined population within the five Delta counties was approximately 3.8 million (see Table 3-2). Sacramento County contributed 37.6 percent of the population of the Delta counties and Contra Costa County contributed 28.2 percent. Yolo County had the smallest population (200,009, or

5.3 percent) of the Delta counties as a whole (see Table 3-2). From 1990 to 2000, population in Delta counties increased significantly (see Table 3-3).

For the 8-year period between 2000 and 2008, the population of the Delta counties increased at an average annual rate of 1.9 percent (15.1 percent in total), with the greatest rate of population growth occurring in San Joaquin County. Population growth in Solano County during this 8-year period was the slowest (1 percent per year). The state showed a 1.6 percent annual growth rate in population during this period, growing at a rate slower than that of the five Delta counties combined.

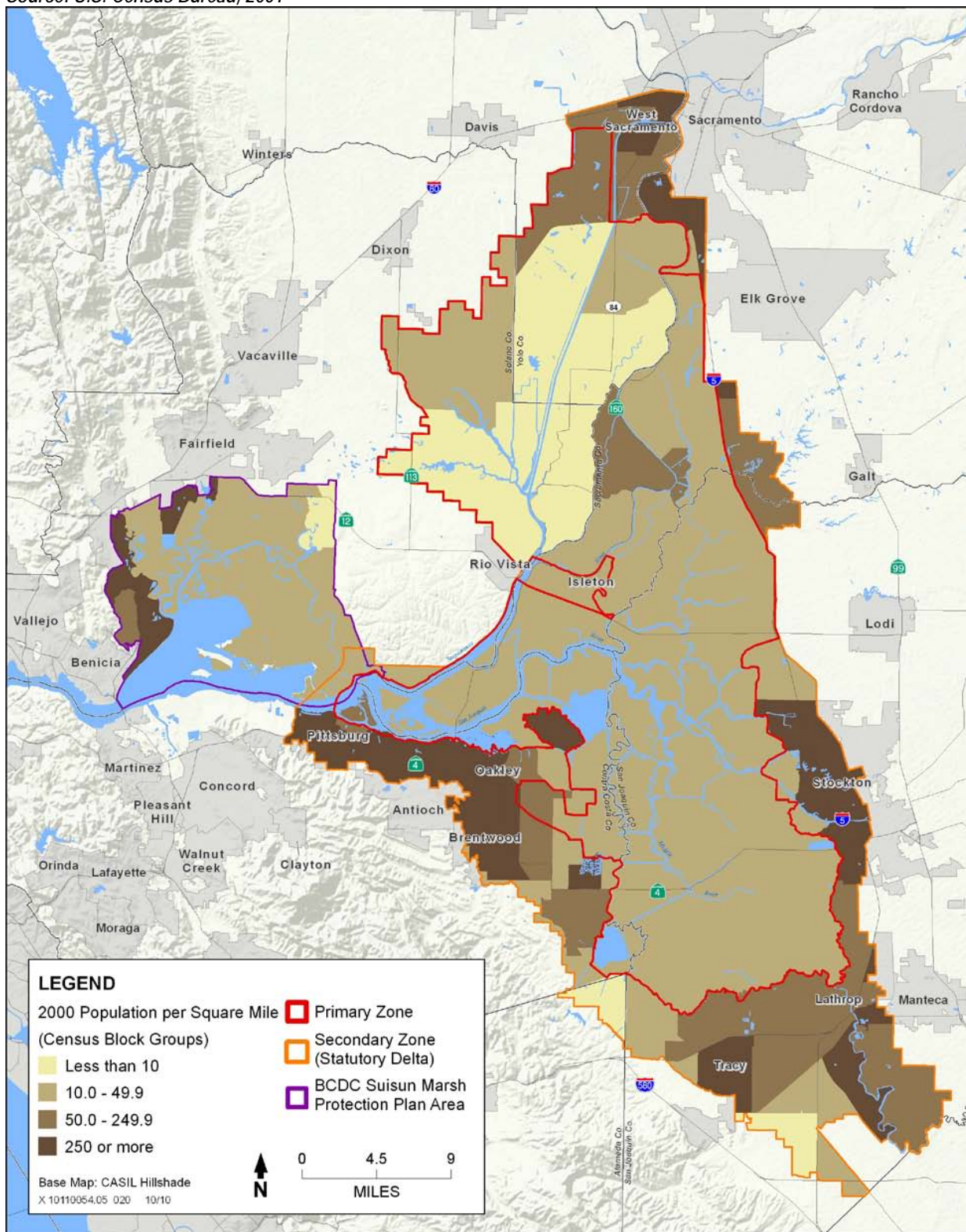
Growth projections through 2030 indicate that the five counties overlapping the Delta, except for Sacramento County, are projected to grow at a faster rate than the state as a whole. Total population in the Delta counties is projected to grow at an average annual rate of 0.9 percent through 2030 (California Department of Finance, 2009). Table 3-2 shows estimated and projected population in the Delta counties. A large share of this growth is associated with westward expansion of the Stockton metropolitan area onto Bishop, Sargent Barnhart, Stewart, and Shima tracts. (DWR, 2008)

The rate of growth among Delta counties masks important differences in growth patterns. Although all Delta counties have unincorporated populations and communities, some counties are much more urbanized than others.

In general, the population density of the Delta is very low. As shown in Figure 3-1, most of the population resides on the fringe of the Delta, within the Secondary Zone. The highest concentrations of people are in the urban centers of Antioch and Pittsburg to the west, Stockton and Tracy to the southeast, and Sacramento to the north, as shown in Table 3-1. The small rural communities of Freeport, Isleton, and Thornton are also located within the Secondary Zone of the Delta. The population within the Primary Zone is centered on several rural communities, including Clarksburg, Courtland, Locke, and Walnut Grove. These communities have experienced land use restrictions within the Primary Zone that prohibit urban development unless proponents can demonstrate that their projects will not result in loss of wetlands or riparian habitat, will not degrade water quality, will not interfere with migratory birds or public access, will not harm agricultural operations, and will not degrade levees or expose the public to increased flood hazards (DPC, 1995). For these reasons, population growth has been relatively low in these communities.

The population of the Delta is relatively diverse as a result of its unique cultural history, the presence of seasonal farm workers, and increasing development within the larger Delta communities. There are high proportions of minority residents in both urban and rural areas, as shown in Table 3-1. Many of the agricultural areas in the interior of the Delta exhibit high proportions of minority residents, including Hispanics, Asians, and African-Americans, due to a combination of historical and recent settlement trends. The average household income in the Delta also varies by community, ranging from \$28,295 in French Camp to \$89,915 in Discovery Bay, as shown in Table 3-1.

1 **Figure 3-1**  
2 **Delta Population Density**  
3 *Source: U.S. Census Bureau, 2001*



4

SECTION 3  
DELTA COMMUNITIES AND ECONOMIC DRIVERS

## DELTA AS A PLACE: LAND USE WHITE PAPER

**Table 3-1**  
**Population, Ethnicity, Housing, and Income Characteristics**

| Jurisdiction                       | Population<br>(2000) | Race (as a percentage) |                                 |   |             |   |                       |                            | Number of<br>Households<br>(Occupied<br>Housing Units) | Total<br>Housing<br>Units | Median<br>household<br>Income<br>(1999) |
|------------------------------------|----------------------|------------------------|---------------------------------|---|-------------|---|-----------------------|----------------------------|--|---------------------------|---|
|                                    |                      | White                  | Black or<br>African<br>American | American<br>Indian<br>and<br>Alaska<br>Native | Asian       | Native<br>Hawaiian<br>and<br>Other<br>Pacific<br>Islander | Some<br>Other<br>Race | Two<br>or<br>More<br>Races |  |                           |   |
| <b>Contra<br/>Costa<br/>County</b> | <b>948,816</b>       | <b>65.5</b>            | <b>9.4</b>                      | <b>0.6</b>                                    | <b>11.0</b> | <b>0.4</b>  | <b>8.1</b>            | <b>5.1</b>                 | <b>344,129</b>   | <b>354,577</b>            | <b>\$63,675</b>                         |
| Antioch                            | 90,532               | 65.3                   | 9.7                             | 0.9   | 7.4         | 0.4   | 9.2                   | 7.0                        | 29,338   | 30,116                    | \$60,359                                |
| Bay Point                          | 21,534               | 46.3                   | 12.7                            | 1.0   | 11.1        | 0.9   | 20.2                  | 7.8                        | 6,525  | 6,716                     | \$44,951                                |
| Bethel Island                      | 2,312                | 90.1                   | 1.4                             | 1.0   | 1.0         | 0.1   | 2.9                   | 3.5                        | 1,113  | 1,345                     | \$44,569                                |
| Brentwood                          | 23,302               | 73.8                   | 2.5                             | 0.6   | 2.9         | 0.3   | 14.5                  | 5.4                        | 7,497  | 7,788                     | \$69,198                                |
| Byron                              | 916                  | 75.0                   | 4.4                             | 1.1   | 2.2         | 0.4   | 14.7                  | 2.2                        | 286  | 309                       | \$35,938                                |
| Discovery<br>Bay                   | 8,981                | 87.6                   | 1.8                             | 0.8   | 1.8         | 0.2   | 4.0                   | 3.8                        | 3,349  | 3,781                     | \$89,915                                |
| Knightesen                         | 861                  | 76.0                   | 0.1                             | 1.4   | 0.2         | 0.7   | 12.5                  | 9.1                        | 281  | 289                       | \$58,929                                |
| Oakley                             | 25,619               | 75.5                   | 3.4                             | 0.9   | 2.9         | 0.3   | 10.6                  | 6.5                        | 7,832  | 7,946                     | \$65,589                                |
| Pittsburg                          | 56,769               | 43.5                   | 18.9                            | 0.7   | 12.6        | 0.9   | 16.1                  | 7.2                        | 17,741   | 18,300                    | \$50,557                                |
| <b>Sacramento<br/>County</b>       | <b>1,223,499</b>     | <b>64.0</b>            | <b>10.0</b>                     | <b>1.1</b>                                    | <b>11.0</b> | <b>0.6</b>  | <b>7.5</b>            | <b>5.8</b>                 | <b>453,602</b>   | <b>474,814</b>            | <b>\$43,816</b>                         |
| Courtland                          | N/A                  | N/A                    | N/A                             | N/A   | N/A         | N/A   | N/A                   | N/A                        | N/A  | N/A                       | N/A                                     |
| Freeport                           | N/A                  | N/A                    | N/A                             | N/A   | N/A         | N/A   | N/A                   | N/A                        | N/A  | N/A                       | N/A                                     |
| Hood                               | N/A                  | N/A                    | N/A                             | N/A   | N/A         | N/A   | N/A                   | N/A                        | N/A  | N/A                       | N/A                                     |
| Isleton                            | 828                  | 69.6                   | 1.4                             | 1.4   | 9.8         | 0.2   | 10.0                  | 7.5                        | 343  | 384                       | \$33,958                                |
| Locke                              | N/A                  | N/A                    | N/A                             | N/A   | N/A         | N/A   | N/A                   | N/A                        | N/A  | N/A                       | N/A                                     |
| Sacramento                         | 407,018              | 48.3                   | 15.5                            | 1.3   | 16.6        | 0.9   | 11.0                  | 6.4                        | 154,581  | 163,957                   | \$37,049                                |
| Walnut<br>Grove                    | 669                  | 49.8                   | 1.5                             | 3.1   | 21.2        | 0.1   | 19.1                  | 2.4                        | 245  | 282                       | \$40,179                                |

Table 3-1

Population, Ethnicity, Housing, and Income Characteristics

| Jurisdiction                  | Population<br>(2000) | Race (as a percentage) |                                 |   |             |   |                       |                            | Number of<br>Households<br>(Occupied<br>Housing Units) | Total<br>Housing<br>Units | Median<br>household<br>Income<br>(1999) |
|-------------------------------|----------------------|------------------------|---------------------------------|---|-------------|---|-----------------------|----------------------------|--|---------------------------|---|
|                               |                      | White                  | Black or<br>African<br>American | American<br>Indian<br>and<br>Alaska<br>Native | Asian       | Native<br>Hawaiian<br>and<br>Other<br>Pacific<br>Islander | Some<br>Other<br>Race | Two<br>or<br>More<br>Races |  |                           |   |
| <b>San Joaquin<br/>County</b> | <b>563,598</b>       | <b>58.1</b>            | <b>6.7</b>                      | <b>1.1</b>                                    | <b>11.4</b> | <b>0.3</b>  | <b>16.3</b>           | <b>6.0</b>                 | <b>181,629</b>   | <b>189,160</b>            | <b>\$41,282</b>                         |
| French Camp                   | 4,109                | 44.2                   | 12.0                            | 0.8   | 4.5         | 0.5   | 32.1                  | 6.0                        | 576  | 598                       | \$28,295                                |
| Lathrop                       | 10,445               | 50.9                   | 4.5                             | 1.2   | 13.4        | 0.5   | 21.1                  | 8.4                        | 2,908  | 2,991                     | \$55,037                                |
| Stockton                      | 243,771              | 43.3                   | 11.2                            | 1.1   | 19.9        | 0.4   | 17.3                  | 6.8                        | 78,556   | 82,042                    | \$35,453                                |
| Terminous                     | N/A                  | N/A                    | N/A                             | N/A   | N/A         | N/A   | N/A                   | N/A                        | N/A  | N/A                       | N/A                                     |
| Thornton                      | N/A                  | N/A                    | N/A                             | N/A   | N/A         | N/A   | N/A                   | N/A                        | N/A  | N/A                       | N/A                                     |
| Tracy                         | 56,929               | 65.2                   | 5.5                             | 0.9   | 8.1         | 0.6   | 13.1                  | 6.6                        | 17,620   | 18,087                    | \$62,794                                |
| <b>Solano<br/>County</b>      | <b>394,542</b>       | <b>56.4</b>            | <b>14.9</b>                     | <b>0.8</b>                                    | <b>12.7</b> | <b>0.8</b>  | <b>8.0</b>            | <b>6.4</b>                 | <b>130,403</b>   | <b>134,513</b>            | <b>\$54,099</b>                         |
| Collinsville                  | N/A                  | N/A                    | N/A                             | N/A   | N/A         | N/A   | N/A                   | N/A                        | N/A  | N/A                       | N/A                                     |
| Rio Vista                     | 4,571                | 88.3                   | 1.2                             | 0.9   | 1.6         | 0.0   | 4.1                   | 3.9                        | 1,881  | 1,974                     | \$44,534                                |
| <b>Yolo County</b>            | <b>168,660</b>       | <b>97.7</b>            | <b>2.0</b>                      | <b>1.2</b>                                    | <b>9.9</b>  | <b>0.3</b>  | <b>13.8</b>           | <b>5.2</b>                 | <b>59,375</b>  | <b>61,587</b>             | <b>\$40,769</b>                         |
| Clarksburg                    | N/A                  | N/A                    | N/A                             | N/A   | N/A         | N/A   | N/A                   | N/A                        | N/A  | N/A                       | N/A                                     |
| West<br>Sacramento            | 31,615               | 65.0                   | 2.6                             | 1.8   | 7.2         | 0.6   | 16.0                  | 6.9                        | 11,404   | 12,133                    | \$31,718                                |

Source: U.S. Census Bureau, 2010. American Fact Finder. Accessed October 18, 2010. URL = <http://factfinder.census.gov>.



**Table 3-2**  
Delta Communities Population, 2000 and 2008

| Area                | 2000<br>Population<br>(millions) | 2008<br>Population<br>(millions) | 2030<br>Projected<br>Population<br>(millions) | Average<br>Annual<br>Growth Rate<br>2000–2008 | Projected<br>Average<br>Annual<br>Growth Rate<br>2008–2030 |
|---------------------|----------------------------------|----------------------------------|---|---|--|
| Contra Costa County | 0.9                              | 1.1                              | 1.3   | 1.4%  | 0.8%   |
| Sacramento County   | 1.2                              | 1.4                              | 1.6   | 2.1%  | 0.6%   |
| San Joaquin County  | 0.6                              | 0.7                              | 1.0   | 2.7%  | 1.8%   |
| Solano County       | 0.4                              | 0.4                              | 0.5   | 1.0%  | 0.8%   |
| Yolo County         | 0.2                              | 0.2                              | 0.2   | 2.3%  | 1.0%   |
| Delta Counties      | 3.3                              | 3.8                              | 4.6   | 1.9%  | 0.9%   |
| California          | 33.9                             | 38.1                             | 44.1  | 1.6%  | 0.7%   |

Source: California Department of Finance, 2010

**Table 3-3**  
County Population

| County Name         | 1990 Population | 2000 Population | % Change |
|---------------------|-----------------|-----------------|----------|
| Yolo County         | 141,092         | 168,660         | 19.5     |
| Sacramento County   | 1,041,219       | 1,223,499       | 17.5     |
| Solano County       | 340,421         | 394,542         | 15.9     |
| San Joaquin County  | 480,628         | 563,598         | 17.3     |
| Contra Costa County | 803,732         | 948,816         | 18.1     |
| Alameda County      | 1,279,182       | 1,443,741       | 12.9     |

Source: U.S. Census Bureau, Census 2000 Redistricting Data (P.L. 94-171) Summary File and 1990 Census.

## Infrastructure in the Delta

Growth and demand for resources brought the need for infrastructure to support development. As agriculture and population in the Delta grew, increasing numbers of levees, dams, diversions, and water conveyance facilities were constructed, as well as roads and utilities that play an important part in the region's economy, communication, and public safety today.

Infrastructure in the Delta includes levees, roads, water and wastewater treatment and conveyance, drainage, utility transmission lines and pipelines, and ports. The Delta also contains major infrastructure of statewide importance, including aqueducts, natural gas pipelines, electricity transmission lines, railroads, shipping channels, and highways. These facilities are owned and operated by a number of public agencies and private entities. The potential cost of a mass failure of this infrastructure to the state's economy is difficult to estimate, but could be in the tens of billions of dollars. The Delta's location between major population centers, its natural resources (especially water and natural gas), its flat terrain, and generally undeveloped condition make the Delta highly valuable as a utility and transportation corridor.

Perhaps the most recognizable trait of the Delta is the ever-present levee system that, in many ways, has shaped the Delta into the form that it has today. The levee system serves to create the navigable sloughs

and waterways throughout the Delta, provides flood security for those communities and agricultural lands in the interior of the Delta, and, in many cases, provides a well-constructed foundation for interior roadways in the Delta, including SR 160. More than 1,115 miles of levees, creating approximately 65 islands or tracts, help protect approximately 700,000 acres of land within the legal limits of the Delta.

Utilities located in the Delta include radio, cellular telephone and television transmission towers; electrical transmission lines and windfarms, including Pacific Gas and Electric Company, Sacramento Metropolitan Utility District, and Western Area Power Administration lines; natural gas pipelines serving local gas fields and regional pipelines; petroleum transportation pipelines; and water transportation canals and pipelines transporting water from the Delta to regional users and to the state and federal water projects.

Local governments regulate the utilities that serve Delta residents and visitors, including potable water, sewage disposal, and solid waste disposal. Most potable water is obtained from groundwater through local wells. Most wastewater from homes and businesses is treated in onsite septic tanks. Some of the larger communities and developments have self-contained wastewater treatment facilities. Communities outside the Primary Zone currently are anticipated to continue releasing treated wastewater into Delta waterways (through wastewater discharge requirements issued by the Central Valley RWQCB), onto constructed wetlands, or onto agricultural lands. Most solid waste generated in the Delta is disposed of at facilities outside the area. Major infrastructure and facilities types are summarized in Table 3-4.

Infrastructure in the Delta is subject to flooding, including private residences and industrial facilities. According to the 1990 Census and HAZUS (Federal Emergency Management Agency [FEMA]-developed software for estimating the effects of disaster), there were approximately 18,270 single-family residential structures in the Delta and 18,900 total residential buildings in the 100-year floodplain of the Delta. Also, about 8,900 structures are located in the West Sacramento portion of the 100-year floodplain, and 5,000 more structures are located in the 100-year floodplain in the Netherlands area near West Sacramento and Courtland, in Reclamation District (RD) 17 (Mossdale), the Moore Tract, and over water. The largest numbers of residential structures in the Delta are in the outlying areas near the Sacramento pocket area (66,000 in the 100-year floodplain), near Stockton (8,000), along the Interstate 5 corridor south of Sacramento, and about 6,000 more spread about the outer zones. Also, about 700 residential structures in the Suisun Marsh are in the 100-year floodplain of the Delta. (DWR, 2008)

In total, about 116,000 residential structures are located in the 100-year floodplain of the Delta. In contrast, fewer than 8,000 residential structures are below the mean higher high water (MHHW) line. Most of these are located on the interior Delta islands; Bethel, Brannan-Andrus, and Wright-Elmwood Tracts account for about half of these.

**Table 3-4**  
**Summary of Major Delta Infrastructure and Facilities**

| <b>Infrastructure/Facility Type</b>                | <b>Summary Description</b>  |
|--|---|
| <b>Surface Transportation</b>                      |   |
| California Department of Transportation (Caltrans) | <p>Maintains SR 4, SR 12, and SR 160 (River Road) and portions of Interstate (I) 80 and I-5; undertaking two projects along SR 4 in Contra Costa County: 1) conversion of high occupancy vehicle lanes from SR 160 to Port Chicago Highway, and 2) widening of SR 4 from Somersville Road to SR 160, including interchanges.</p> <p>Owens approximately 480 acres of land between I-80 and the railroad right-of-way at the north end of the Yolo Bypass proposed for enhancement as wildlife habitat.</p> <p>Owens approximately 630 acres in the Delta (DPC, 2005).</p> <p>Maintains more than 50 bridges, including approximately 30 drawbridges, span the navigable channels of the Delta.</p>                |
| Railroads  | <p>Union Pacific Railroad from Oakland to Sacramento carries freight and the Capital Corridors passenger service; freight service ships a mixture of automotive and intermodal service.</p> <p>Union Pacific Railroad from Fremont to Stockton carries passenger and freight.</p> <p>Burlington-Northern and Santa Fe Railroad (BNSF) to Stockton carries freight and passengers on the Amtrak line between Stockton and Oakland (through Port Chicago).</p>  |
| <b>Ports</b>                                       |   |
| Sacramento Port Authority                          | Owens and operates facilities and the navigation channel for ships to enter the Port of West Sacramento through San Francisco Bay and passage up the Sacramento River and the 43- mile Sacramento River Deep Water Ship Channel. The port authority also owns a portion of Decker Island along the Sacramento River and land on Prospect Island at the south end of the Sacramento River Deep Water Ship Channel (DPC, 1994).   |
| Stockton Port Authority                            | Owens and operates the Port of Stockton located on the Stockton Deep Water Ship Channel. The authority also owns and operates a diversified and major transportation center that covers approximately 2,000 acres. The Stockton Port Authority purchased several small Delta islands and portions of islands to construct the Stockton Deep Water Ship Channel, including Donlon Island, the center of Browns Island, Mandeville Tip, Venice Cut, Tule Island, North Headreach, North and South Spud islands, a portion of Acker Island, and a portion of Roberts Island, for a total of approximately 1,740 acres in the Delta. The total acreage includes a spoils disposal site on Roberts Island (DPC, 1994). |
| Rough and Ready Island                             | Previously the site of a U.S. Navy supply depot, the approximately 1,561-acre Rough and Ready Island is under the control of the Stockton Port Authority. The island was approved in July 2004 by the City of Stockton as part of the Rough and Ready Redevelopment Project Area. Rough and Ready Island is designated as "Port Industrial" and is planned to be redeveloped in industrial, warehousing, and other port-related uses (City of Stockton Website, 2009).  |
| <b>Wastewater</b>                                  |   |
| Lodi   | Owens and operates wastewater collection and treatment services at the White Slough Water Pollution Control Facility located along I-5 west of Lodi. The city owns more than 1,000 acres adjacent to the treatment facility and leases more than 900 acres to local farmers for the cultivation and harvesting of feed and fodder crops. (City of Lodi, 2006).  |
| Ironhouse Sanitation District                      | Operates a wastewater treatment facility for Oakley on Jersey Island. The district has established discharge/evaporation ponds on the island for ground-based wastewater treatment processes. Jersey Island additionally maintains active crop and grazing lands. Jersey Island totals approximately 3,600 acres (Ironhouse Sanitary District Website, 2009; Milani & Associates Website, 2009).  |



Table 3-4  
Summary of Major Delta Infrastructure and Facilities

| Infrastructure/Facility Type             | Summary Description   |
|--|---|
| <b>Transmission/Pipelines</b>            |   |
| Pacific Gas & Electric                   | <p>More than 500 miles of transmission lines and more than 60 substations lie within the Delta boundaries. Several electrical peaking plants surrounding the Delta depend on these transmission lines.</p> <p>Within the larger Delta-Suisun Marsh area are approximately 240 operation gas wells. Natural gas pipelines serve local gas fields and regional pipelines.</p> <p>Pipelines carry gasoline and aviation fuel across the Delta from Bay Area refineries to depots in Sacramento and Stockton for distribution to Northern California and Nevada.</p> <p>6,400 feet of high-pressure natural gas transmission pipeline to be “pulled” under the Empire Cut River (Line 57B) due to concerns about stability of the aging levee system.</p> |
| Sacramento Metropolitan Utility District | Proposes to construct and operate the third phase of the Solano Wind Project. Operates and maintains existing wind project in the County (Phases 1 and 2) with 102 megawatts (MWs) of wind energy. Phase 3 will add up to 128 MW, totaling up to 230 MWs of clean renewable power. Phase 3 includes up to 75 wind turbine generators and associated facilities in the Montezuma Hills, southwest of Rio Vista.  |
| Mokelumne Aqueduct                       | Three pipelines serve as the main municipal water conveyance facility for 1.3 million people in the East Bay Municipal Utility District service area. The aqueduct crosses five Delta islands/tracts (Orwood Tract, Woodward Island, Jones Tract, Roberts Island, and Sargent-Barnhart Tract) protected by levees.  |

## Delta Communities and Culture

Within the five Delta counties are numerous communities with populations ranging from thousands (e.g., Pittsburg) to a few hundred (e.g., Walnut Grove), each with its own sense of place and culture. Some communities host industries that support growing economies. Other communities struggle to stay afloat economically and rely solely on income from tourist and recreational activities. Although all of these communities are unique and have different demographics, economic drivers, and stressors, the unique and varied landscape, heritage, and residences, and businesses found in the Delta combine to create a distinctive environment that supports its own social and cultural character. Several small recreational areas including campgrounds, marinas, and recreational vehicle parks also foster their own sense of place and community and invite seasonal residents and tourists.

It is important to note that there are risks associated with some of these communities' locations on reclaimed land adjacent to major waterways and protected by man-made levees. The possibility of inundation caused by levee breaks, whether triggered by a seismic event, oversaturation, or another structural failure, is high, and many levees have failed in the Delta in the past. Recently, this reality has been considered more seriously by policymakers and will likely play a significant role in the future planning of the communities described in this section. The following sections contain brief descriptions of Delta communities, organized by community within the Sacramento River watershed, the San Joaquin River watershed, the Contra Costa County shoreline, and the South Delta. In general, the



characterizations briefly summarize the formation and history of each city and community; discuss population, housing trends, and economic characteristics; and identify festivals, events, and other distinguishing features within each city and community. Delta community culture is described in the final section.

## Sacramento River Communities

Sacramento River communities are West Sacramento, Sacramento, Freeport, Clarksburg, Courtland, Hood, Locke, Walnut Grove, Thornton, Isleton, and Rio Vista in Sacramento, Yolo, and Solano counties. These communities are at risk for sea level rise and salinity intrusion that could affect water supplies and the productivity of agricultural lands. Areas near the cities of Sacramento and West Sacramento also have experienced urban encroachment into agricultural areas and the conversion of agricultural lands.

- ◆ **City of West Sacramento** – Located in southeast Yolo County, in the northern portion of the Delta, West Sacramento supports a wide variety of residential, commercial, and industrial uses. Uses associated with the river include warehouses, storage yards, industrial plants (including rice processing), marinas, boat ramps, harbors, walking and bike trails, and the Port of West Sacramento. Increases in residential land uses accompanied population growth over the last three decades. West Sacramento is bounded by the Sacramento River to the north and east and the Sacramento River Deep Water Channel and Yolo Bypass to the west.

- ◆ **City of Sacramento** – Located at the confluence of the Sacramento and American rivers near the northern edge of the Delta, the City of Sacramento is the largest community in or adjacent to the Delta. Sacramento is tied to recreational activity on the Sacramento and American rivers. The Sacramento River has historically functioned as a major water transportation route. The city was the northern extent of travel for steamboats, and the waterfront was the center of commerce during the mid- to late-1800s.



- ◆ **Freeport** – Freeport is located just south of the City of Sacramento on the east shore of the Sacramento River. During the 1910s and through the 1920s, the Sacramento Southern Railroad passed through Freeport and brought economic growth to the area. During the Gold Rush, Freeport served as a major shipping center. Subsequently, agriculture has been the core of the local economy.

- ◆ **Clarksburg** – Clarksburg is located in southeast Yolo County, in the vicinity of Courtland and Freeport. The economy of Clarksburg historically has been based on agriculture. The town's major industry was the Old Sugar Mill, which closed in 1993. Because it is an agricultural rural area, Clarksburg has historically included adjacent agricultural lands and associated residences, including those located on Merritt Island. Reflecting the community's agricultural heritage and ties to the land, the community is experiencing an increase in winery-related business, while water-oriented recreational facilities in the town are limited to a boat landing and marina.



- 1 ♦ **Courtland** – Courtland is located in the north Delta, along SR 160, approximately 18 miles south  
2 of Sacramento. Its primary geographic feature is the Sacramento River. Construction of a wharf  
3 in the late 1800s opened the community to easy trade with Sacramento and other Delta towns.  
4 The community boomed with the rise in nearby agriculture through the beginning of the 20th  
5 century (Pezzaglia, 2010). The community also contained the largest Chinatown in the Delta.
- 6 ♦ **Hood** – Hood is located on the east side of the  
7 Sacramento River along SR 160, approximately 5  
8 miles south of Freeport. The community is composed  
9 of scattered rural residences and agricultural uses.  
10 Minimal commercial services are available in Hood,  
11 and many businesses located along SR 160 are vacant  
12 or abandoned. The community is connected to I-5 a  
13 few miles to the east via Hood Franklin Road. Large  
14 commercial centers are located just east of I-5 in the  
15 City of Elk Grove.
- 16 ♦ **Locke** – Locke is approximately 23 miles south of downtown Sacramento and immediately north  
17 of Walnut Grove. Locke was founded in 1915 after a fire in Walnut Grove destroyed much of the  
18 established Japantown and Chinatown. A handful of businesses had been established in Locke by  
19 Chung Shan merchants in 1912 to help support the asparagus industry, but it was not until 1915  
20 that the community was formally established and it became a true population center. Locke  
21 remained primarily Chinese through the 1970s as older residents retired and stayed in the  
22 community (National Park Service, 2010). Locke is considered a key destination for recreational  
23 activities.
- 24 ♦ **Walnut Grove** – Walnut Grove is located in the central part of the Delta, approximately 24 miles  
25 south of downtown Sacramento and 6 miles south of Courtland. After a post office was  
26 established in the community in the late 1800s, Walnut Grove grew quickly. By 1905,  
27 approximately 80 percent of the nearby agricultural lands were being farmed by Japanese  
28 residents of Walnut Grove. In the 1940s, the Japanese residents of Walnut Grove were forcibly  
29 relocated during World War II. Walnut Grove is smaller than it was in the 1920s and 1930s but is  
30 still a key community in the Delta. The main urban center of Walnut Grove is located on the east  
31 side of the Sacramento River, but the community is also tied to additional businesses and  
32 residential areas on the west side of the Sacramento River, immediately across the Walnut Grove  
33 Bridge on Grand Island.
- 34 ♦ **City of Isleton** – Located along the east shore of the Sacramento River, Isleton is in the center of  
35 the Delta, within the Delta's Secondary Zone. The area was permanently settled in the 1860s,  
36 initially by farmers and laborers who built levees as part of the reclamation of Delta lands. The  
37 city has many preserved 19th-century-era storefronts along its main street, some of which show  
38 distinct Chinese influences. A Japanese section of the main street developed after Japanese people  
39 began immigrating to Isleton. The Chinese and Japanese areas of the main street are registered  
40 today as a national historic district. The Filipino community also has been an important part of  
41 Isleton. The Isleton wharf was a frequent stop for water traffic from San Francisco to Sacramento  
42 in the early 1900s. The city has recently approved housing units on the east side of the city; these  
43 housing units are constructed on stilts to protect the properties from potential flooding. In  
44 addition, the city is considering the expansion of the city south onto existing agricultural fields to  
45 Oxbow Marina.



- ◆ **Thornton** – Thornton, originally known as New Hope Landing, is located in northwest San Joaquin County. It has remained a small community since its founding. In 1928, a cannery was built east of the railroad tracks, and over the years, the cannery processed peaches, plums, asparagus, onions, tomatoes, potatoes, apples, and even sodas (San Joaquin County, 2009). The cannery closed in 2002. Thornton is bounded by I-5 on the west and rail lines on the east. For the most part, the community is separated from major Delta waterways by I-5. However, the Mokelumne River flows along the northeastern side of the community before entering the Delta. A local equestrian center offers riding with views of Delta waterways. Additional water-oriented recreation is available within minutes of crossing I-5. Residential and agricultural uses dominate the community.
- ◆ **City of Rio Vista** – Located on the west bank of the Sacramento River in eastern Solano County, Rio Vista experienced stable growth throughout the 20th century. Rio Vista sits west of Isleton along SR 12, with the historic downtown oriented toward the Sacramento River. Remote islands and networks of waterways provide access into natural areas near Rio Vista, and the bridge connecting Rio Vista to Brannan Island across the Sacramento River is an identifiable Delta landmark. Rio Vista's economy has been dominated by agriculture and natural gas production and related businesses for the past century. Delta recreation-based facilities and businesses located in Rio Vista near the Sacramento River include marinas, harbors, fishing piers, bait and tackle shops, and boat launches. A U.S. Coast Guard station is also located along the river in this area.

## San Joaquin River Communities

San Joaquin River communities are Tracy, Lathrop, French Camp, Stockton, Terminous, and Collinsville. These communities are at risk for sea level rise and salinity intrusion that could affect water supplies and the productivity of agricultural lands. Areas near the cities and Tracy, Lathrop, and Stockton also have experienced urban encroachment into agricultural areas and the conversion of agricultural lands.

- ◆ **City of Tracy** – Tracy is situated at the junction of three major transportation corridors linking the San Joaquin Valley, the San Francisco Bay Area, and southern California: I-580, I-205, and I-5. It has experienced a high degree of urbanization over the last 20 years and is more urbanized than many other Delta communities. San Francisco Bay Area residents increasingly began to buy homes in Tracy in the 1980s as Bay Area housing prices soared, and much of the growth in Tracy over the last few decades has been fueled by an influx of residents who commute to work in the Bay Area.
- ◆ **City of Lathrop** – Lathrop is located immediately east of the legal Delta and is largely removed from Delta waterways. However, the San Joaquin River is located roughly 2 miles west of the community. In general, access to the San Joaquin River in San Joaquin County is limited because most marinas are private. Lathrop experienced noticeable growth in the 1970s and 1980s and, since 2000, has begun to develop on the west side of I-5. A prominent example is the River Islands at Lathrop Specific Plan that includes “high ground” levees 200 – 300 feet wide.
- ◆ **French Camp** – French Camp is located between the City of Stockton to the north and the City of Lathrop to the south. Key transportation linkages that developed during the 1900s included the use of French Camp Slough for water transit to Stockton and the establishment of Southern Pacific and Western Pacific rail lines through the community. French Camp was designated a California State Historical Landmark in 1959. French Camp is located immediately east of the legal Delta and is largely removed from Delta waterways. However, French Camp Slough runs along the northern extent of the community.



- ◆ **City of Stockton** – Stockton is the second largest city bordering the Delta, located in central San Joaquin County between I-5 and SR 99. Distribution has become a major component of Stockton’s economy because the city capitalizes on port, rail, and highway distribution avenues. The San Joaquin River deep water channel was created in 1933 to connect the Port of Stockton to the San Francisco Bay and made the city accessible to ocean-going vessels (San Joaquin County, 2009). The port is now the easternmost deep water port located on the west coast. Large amounts of Central Valley agricultural products pass through the Port of Stockton, which is the third largest landholder port in California. Stockton has strong commercial ties to the Delta and a strong recreational focus on the Delta. Stockton’s recreational opportunities are largely tied to the Delta, such as trails on Delta waterways, several marinas, and public boat launches.
- ◆ **Terminous** – Located at the intersection of SR 12, the South Fork of the Mokelumne River, and Little Potato Slough, Terminous was established as a small settlement in the 1890s after reclamation of Delta lands for agriculture was initiated. The town remained small until 1927, when the Western Pacific Railroad extended service to Terminous (Lee and Kennedy, 2004). Following a large flood in 1959, Western Pacific Railroad began to phase out operations in Terminous, and by the mid-1960s, the community was largely uninhabited (Lee and Kennedy, 2004). The Tower Park Marina was established in 1969, and the area now supports boat storage slips, repair shops, a general store, a restaurant, a bar, a 250-site campground, and a mobile home park.
- ◆ **Collinsville** –Collinsville and surrounding areas include about 8,500 acres located in the extreme southeastern portion of Solano County. Located south of SR 12 approximately 10 miles southwest of Rio Vista and 15 miles southeast of Travis Air Force Base (AFB) and Fairfield, Collinsville is bordered on the south and southwest by the Sacramento River and on the west by Montezuma Slough and Suisun Marsh. Current land uses in Collinsville include natural resources land, utility operations, publicly owned open land, residences, wind farms, and agricultural lands.



## Contra Costa County Shoreline Communities

Contra Costa County shoreline communities include Antioch, Bay Point, Pittsburg, Oakley, Bethel Island, Brentwood, and Discovery Bay. These communities are at risk for sea level rise and salinity intrusion that could affect water supplies and recreation.

- ◆ **City of Antioch** – Antioch, located in northeast Contra Costa County along the shore of the San Joaquin River, is the largest incorporated Contra Costa County community located in the Delta. The community is served by SRs 4 and 160. SR 160 links Antioch with Delta communities to the north via the Antioch Bridge. The waterfront area has played a major role in the physical and economic development of Antioch. Farming also played an important role in the community. Agricultural produce originally was shipped out via the San Joaquin River. The agricultural industry was established in the late 1800s, after rail connections to Antioch were made, and continued robustly until the 1970s. Commercial fishing and canning also was once a strong and important industry. A new Marsh Landing power plant by Mirant Corporation will be constructed on Wilbur Avenue, on land currently occupied by five unused oil tanks next to the Contra Costa Power Plant, which it would replace. The Georgia Pacific Gypsum Plant (formerly Domtar Gypsum) is located within the city at 801 Minaker Drive. Other major industrial businesses

located along the waterfront include a concrete manufacturer, landscape supply services, logistics service providers, a recreational vehicle storage facility, and boat clubs and marinas.

- ◆ **Bay Point** – Bay Point is located in eastern Contra Costa County. The community previously was known as Bella Vista and West Pittsburg. It is generally located west of Pittsburg between SR 4 and the Burlington Northern and Santa Fe (BNSF) railway lines. The Bay Point area has supported industries ranging from cattle ranching to fishing to coal production. New residential development came to the area during the post–World War II boom of working-class housing construction. Bay Point is primarily a suburban community, consisting of residential neighborhoods for people who commute to jobs in the Bay Area. Most of the Bay Point shoreline consists of salt marsh and wetland open space. The BNSF railway lines run parallel to the shoreline and limit public access to Suisun Bay from Bay Point. However, a marina and a regional park provide limited access to Suisun Bay.

- ◆ **City of Pittsburg** – Pittsburg is a suburban community located in northeastern Contra Costa County, near the western limits of the legal Delta. Historically, connection to the water played a key role in the development of the community. Near the turn of the 20th century, the community shifted to more industrial activities. In the mid-20th century, Pittsburg became home to petrochemical processing plants, which continue to operate today. In the 1970s and 1980s, while retaining its industrial base, Pittsburg grew as a suburban community for people employed in central and western Contra Costa County. Pittsburg’s waterfront was historically used for fishing and industry. Although no longer a site for commercial fishing, the area remains popular for sport fishing. Industrial land and open space (primarily Suisun Bay wetlands) are the dominant land uses in the waterfront area today.

- ◆ **City of Oakley** – Oakley is located in northeastern Contra Costa County. Permanent settlement in the Oakley area followed the establishment of a rail stop around the turn of the 20th century. Agriculture was historically a key component of Oakley’s economy. Although the older downtown area has smaller homes on small lots, development over the last few decades has been largely suburban in character. Oakley has undergone dramatic growth in recent decades. Suburbanization and agricultural uses are competing for land as the community continues to grow.

- ◆ **Bethel Island** – Located near the northeastern limits of Contra Costa County in the central Delta, Bethel Island was founded in the 1870s with the creation of levees that transformed the area into an island. Bethel Island is connected to the nearby communities of Oakley and Knightsen by the Bethel Island Road Bridge over Dutch Slough. Several marinas and harbors are found along the island’s perimeter, and sports and recreation stores focusing on water-oriented recreation are common. The island supports scattered residences and small pockets of livestock grazing and farming. Many homes front Delta waterways and have docks for personal boats. The island also supports a variety of cabins, recreational vehicle facilities, overnight boat berthing, and camping sites. The interior of the island offers a golf course. A new residential subdivision is currently under construction on the island. This project, known as Delta Coves, would breach an existing levee to connect the subdivision’s waterways to Dutch Slough, but it would provide sheet-pile levee protection for the new homes.



- ◆ **City of Brentwood** – Brentwood is located in far eastern Contra Costa County, south of Oakley, along SR 4. The city is not served by any interstate highways. Brentwood was long an agriculturally oriented community, but, like many communities located on the margins of the San Francisco Bay Area, it has undergone rapid suburbanization in recent years. Brentwood's population more than doubled between 2000 and 2008, Population growth was accompanied by new suburban development and commercial retail, which have been constructed on undeveloped land over the last few decades.



- ◆ **Discovery Bay** – Discovery Bay is a waterfront community located just south of Brentwood and Oakley. It began to develop in the 1970s as a residential community with waterfront lots and private docks providing access to the Delta. Initially, many homes were used as weekend getaways; however, over time, the community became home to permanent residents. Key recreational activities in Discovery Bay include golf, boating, and fishing. The Discovery Bay Yacht Club is a modern marina that provides an array of services, including shopping and dining opportunities. The community's identity is tied to the Delta, with water-oriented businesses, waterfront homes, and an active chamber of commerce forming key attributes of the community.

## South Delta Communities

South Delta communities include Knightsen and Byron, both unincorporated. The loss of agricultural land from development is the primary threat.

- ◆ **Knightsen** – Knightsen is located in eastern Contra Costa County south of Oakley and Bethel Island. The town was founded in the late 1800s in conjunction with a rail stop. It has remained a small farming community throughout the years. Agriculture has focused on almonds, walnuts, and sunflower seeds. The community is largely comprised of rural homes and agricultural uses, such as crop fields and horse ranches. Knightsen is bisected by the BNSF railway lines. The center of town supports small retail shops and agricultural businesses.
- ◆ **Byron** – Located south of Brentwood in the southwest Delta, Byron was established in 1878 as a railroad stop and later flourished as an important agricultural center. The Byron area is composed of sparsely populated agricultural land, with scattered rural homes. Limited services such as a gas station, post office, and car repair are available in the town. No major Delta waterways are located in Byron, although access to waterways is available within a few miles of the community.

## Community Culture and Place

One of the most attractive characteristics about living in the Delta is the unique lifestyle it offers—a beautiful rural setting near the urban areas and employment centers of Sacramento, Stockton, and the Bay Area. For residents, the privacy, rural lifestyle, and developed sense of community cohesion are generally cited as what keeps them living in the Delta. For visitors, the opportunity to escape the pressures of their urban lives; freely travel from small community to small community; fish and recreate in a large, complex network of waterways; and explore the history of the area – all within a day's drive of much of northern California – are considered draws to the area.

The size of the communities in the Delta varies from relatively large suburbs of the Bay Area, to smaller communities in the interior of the Delta that have very little opportunity to expand. In the larger suburbs, the influence of the Delta is less pronounced in daily life. These communities, particularly on the western

end of the Delta, have experienced sizeable growth over the past few decades as Bay Area commuters have moved into the area. The residential growth has attracted a range of other businesses, including large “big box” stores (e.g., Wal-Mart, Home Depot, Target, etc.) and other development typical of large suburbs. For these larger communities, the interior Delta is generally seen as integral part of their history and a resource used for recreation and leisure by those fortunate enough to own a boat and have available free time.

The way of life present in the smaller communities in the interior of the Delta is different than what is experienced in the larger communities on the periphery. For these residents, their communities are less suburban and typically more rural, bounded closely by agricultural lands or open space. In contrast to the larger communities and their increased rates of growth, the smaller communities in the interior of the Delta have not experienced new development at nearly the same pace as Central Valley and Bay Area communities, and many of the same families that have lived in the area for generations are still present. These communities include a range of small businesses that cater to residents and visitors alike, including restaurants, marinas, and small shops. Although these residents value the recreational opportunities and natural processes that make these opportunities possible and desirable, the Delta’s roads, levees, and waterways provide a much more utilitarian function for these residents than they do for tourists, boaters, or fishermen. Indeed, the Delta’s landscape, environment, and infrastructure support the livelihood of these residents.

Threats to the natural beauty, rural ambiance, or biological resources of the area are interpreted not only as potentially affecting a major percentage of the local economy, but also affecting them directly by changing those aspects of place that attracted them to live in the Delta in the first place. These concerns typically involve water quality, water salinity, and increased development. Agricultural lifestyles are also affected by these concerns, as many residents value the agricultural history of the surrounding lands and value the presence of agriculture in the area that relies on a safe, clean water supply and limited development.

## Economic Drivers

The economy of the Delta has its roots in the rich agricultural lands still present in the area. Industries grew in the last century to take advantage of easy access to waterways and transportation corridors. More recently, with the growth of nearby suburban communities and cities, recreation and tourism have become more popular in the Delta, supporting the local economy.

The DPC reports that the Delta economy in 1994 represented 1.5 percent (\$10.6 billion) of personal income in California and 1.8 percent of employment (249,000 jobs). The entire Delta generated \$21.2 billion in output in 1994. Manufacturing was the largest sector, producing \$4.5 billion worth of goods. This was followed by trade (wholesale and retail), which generated \$3 billion in output, and services, which created \$2.9 billion in output. In-Delta agriculture contributed less than \$1 billion annually to the region (DWR, 2007).

## Agriculture

For decades, Delta agricultural fields grew some of California’s most well-known crops, including asparagus and pears. This economic activity served to attract a range of ethnic and racial groups to the Delta, eager to find jobs in the agricultural fields and orchards. Agriculture increased in the Delta due to the rich soil, ample water supplies, and proximity to urban markets. The waterways of the Delta provided an efficient means for agricultural products to be quickly transported to urban centers like Stockton or Sacramento for processing, packing, and shipment.

Today, the agricultural sector is still important in the Delta, but changes in mechanization and processing have resulted in a much smaller proportion of residents participating in agriculture than was the case during the early part of the 20<sup>th</sup> century. Employment data suggest that agriculture is a fairly small sector of the economy relative to other sectors such as government and retail trade at the county level. Part of the explanation for this is that the counties include cities such as Sacramento, Stockton, and Antioch that are outside the Delta Primary Zone. By their nature, cities are concentrations of nonrural economic activity. County-level data that include the cities tend to diminish the important role of agriculture in more rural areas of the counties. Commercial agriculture and the associated services, packing, processing, and transportation activities are critical components of the Delta's economic and social character.



Irrigated crop lands including corn, alfalfa, grain, irrigated pasture, safflower, tomatoes, grapes, and asparagus are important to the vitality of the Delta. Perennial crops such as asparagus, fruit trees, and grapevines that have a large fixed investment in growing stock have an economic life of 10 years or more. Viticulture is growing in importance economically for some of the communities in the interior of the Delta. While vineyards have been present in the Delta since the early days of agricultural production, the more recent attention paid to California wines and vineyards, associated with the agricultural tourism, has increased the importance of viticulture in this area. Concentrated around Clarksburg, approximately 11 different appellation vintners have either lands or distribution facilities in the Delta. The Delta has become a large source of wine grapes for vintners in Napa County.

As of 2008, the six Delta counties had a total of 2.3 million acres of agricultural land. Over half of Delta irrigated acreage is in San Joaquin County; Sacramento County has the second largest share, with the remainder split among Contra Costa, Solano, and Yolo counties. Adjacent to the Suisun Marsh in wetlands and lowland grasslands, grazing and grain crops are the primary agricultural land uses. These agricultural land uses also provide habitat for marsh-related wildlife and buffer these habitats from urban development (Solano County, 2008).



## Industry

Access to local waterways that connect to the San Francisco Bay, and ultimately to the Pacific Ocean, provides a valuable asset to Delta communities. The ability to manufacture products and quickly ship them out to the global economy presents a valued opportunity for industries and creates more industrial development opportunities in the Delta. The Delta's proximity to the ports of Oakland and San Francisco allows for industrial development in the Delta closer to these major coastal ports that can accommodate large shipments of goods and materials. Enhancements to the ports of Sacramento and Stockton, and plans to consider or develop other inland ports connected by shortline rail (such as West Park in Stanislaus County), could further increase the importance of the Delta.

A water-dependent industrial area is located in the southeast portion of the Suisun Marsh east of Montezuma Slough and north of the Sacramento River near Collinsville. This area is specifically designed to accommodate industrial development along the Sacramento River. This waterfront represents one of the few remaining undeveloped areas with deep-water access in the San Francisco Bay Area. In the Collinsville area, 6,900 acres have been designated for Water Dependent Industrial use. Approximately 5,100 of these acres have been zoned Water Dependent Industrial and are undeveloped.

Approximately 600 acres are zoned for industrial uses in Rio Vista, including both manufacturing and service companies. Most of the industrial development is situated north of SR 12 in areas along the waterfront, at the Rio Vista Business Park, and along Airport Road. The 160-acre Northwest Wastewater Treatment Plant is also identified as an industrial land use. Approximately 280 acres are devoted to the Rio Vista Airport, located north of Airport Road and west of Church Road. The facility operates a helipad and two runways and includes a 12-acre business park and office/administration buildings. The presence of a small airport allows the possibility of shipping commercial and industrial commodities in and out of the Delta quickly and efficiently.

Other major industrial areas are near Pittsburg and Antioch and consist of heavy chemical and steel industries.

## Recreation and Tourism

Today, the Delta is a unique geographic region that provides exceptional recreational opportunities including boating, fishing, hunting, hiking, biking, camping, wildlife viewing, agri-tourism, and site-seeing. Recreational users originate from both within and outside of the Delta. Many of the visitors value the wide expanses of open land, interlaced waterways, historic towns, and the lifestyle offered by the Delta.

Navigational waterways in the Delta and Suisun Marsh are available for public access and make up the majority of recreational opportunities. Boating use totals more than 6.4 million visitor days annually, composed of 2.13 million annual boat trips in the Delta-Suisun. The DPC estimated that in 1998, people spent about \$378 million for Delta-oriented boating and fishing recreation. Most of the land within the Delta and Suisun Marsh is privately owned, which reduces the availability of land-based recreation (DWR, 2007).

Boat fishing is a popular and widespread activity in the Delta. Game fish found in the Delta include bluegill and redear sunfish; largemouth, smallmouth, and striped bass; crappie, bullhead catfish, channel catfish, and shad, salmon, steelhead, and sturgeon runs, as well as crawdads (SacDelta Website, 1998). Boat fishing is a year-round activity in the Delta, with peak-use seasons varying by species, species abundance, and angling regulations. Striped bass are prevalent in spring, sturgeon between winter and spring, salmon in late summer through fall, and stripers and steelhead in the fall and winter (California Department of Parks and Recreation [DPR] Website, 2009). The Delta maintains a very productive trophy bass fishery, and numerous bass tournaments are held in the Delta throughout the year (except in 2008 and 2009, when tournaments were cancelled).





## Section 4 Local Plans and Policies

This section describes general plan policies in the counties and cities within the Delta, the relationship of these policies to the objectives of the Act, and potential future policy issues for the Delta that arise from the nexus between local planning policies and the goals and objectives of the Delta Plan.

Included in this section are descriptions of general plan land use designations, policy direction, general growth patterns, relationships with respect to habitat/natural communities' conservation plans, and policies in the Secondary Zone. The land area within the jurisdiction of the Act is land within the legal Delta, and most of this land is within county unincorporated areas. County lands within the Primary Zone are designated for agriculture, natural resources, recreation, and other open space uses, with some unincorporated communities and limited development potential. The geographic area of the Primary Zone includes five counties: Contra Costa, Sacramento, San Joaquin, Solano, and Yolo. The Primary Zone also contains small unincorporated communities and "legacy communities" or towns with distinct natural, agricultural, and cultural heritage described in Public Resources Code section 32301(f). These possess a rural charm and include cultural events, specialty local businesses, and nearby recreational opportunities that are attractive to many visitors. The Primary Zone includes the following cities, towns, and villages: Clarksburg, Courtland, Hood, Knightsen, Locke, Rio Vista, Ryde, Terminus, and Walnut Grove.

SECTION 4  
LOCAL PLANS AND POLICIES

## DELTA AS A PLACE: LAND USE WHITE PAPER

The Secondary Zone encompasses the same five counties as the Primary Zone, as well as Alameda County. This white paper does not explore the land use designations and policy direction provided in the Alameda County General Plan (East County Area Plan) because no part of the county lies within the Primary Zone, and only a small portion of the county lies within the Secondary Zone. Due to the small area of land within the legal Delta, a detailed description of the policies and land use designations for the county is not warranted.

The Secondary Zone includes historic urban communities with numerous commercial and industrial businesses that serve agricultural and suburban communities, and rely on the Delta for high quality water supplies and navigable waters to efficiently transport goods and materials. The Secondary Zone also includes the following cities, towns, and villages: Antioch, Bay Point, Bethel Island, Bird's Landing, Brentwood, Byron, Collinsville, Discovery Bay, Freeport, Isleton, Oakley, Pittsburg, Sacramento, Stockton, Tracy, and West Sacramento.

Figure 4-1 shows the locations of the five Delta Counties and cities with respect to the boundaries of the Primary and Secondary Zones while Figures 4-2 through 4-6 show the counties' general plan land use designations within the Primary and Secondary Zones. Table 4-1 provides a breakdown of land within the Primary Zone and Secondary Zone by county.

**Table 4-1**  
**Delta Acreages by County**

| <b>Name</b>         | <b>Total Acres</b> | <b>Acres in Primary</b> | <b>% in Primary</b> | <b>Acres in Secondary</b> | <b>% in Secondary</b> | <b>Acres in Legal Delta</b> | <b>% in Legal Delta</b> |
|---------------------|--------------------|-------------------------|---------------------|---------------------------|-----------------------|-----------------------------|-------------------------|
| Yolo County         | 653,080.18         | 74,704.22               | 11.44               | 17,309.05                 | 2.65                  | 92,013.27                   | 14.09                   |
| Sacramento County   | 635,899.75         | 95,490.81               | 15.02               | 22,923.24                 | 3.60                  | 118,414.04                  | 18.62                   |
| Solano County       | 582,030.06         | 86,171.69               | 14.81               | 6,304.23                  | 1.08                  | 92,475.91                   | 15.89                   |
| San Joaquin County  | 912,390.44         | 187,830.51              | 20.59               | 129,519.88                | 14.20                 | 317,350.40                  | 34.78                   |
| Contra Costa County | 513,719.73         | 45,852.20               | 8.93                | 66,621.84                 | 12.97                 | 112,474.03                  | 21.89                   |
| Alameda County      | 525,040.04         | 0.00                    | 0.00                | 4,641.56                  | 0.88                  | 4,641.56                    | 0.88                    |

Source: AECOM, 2010

Local land use policies and land use designations provide direction for how and where urbanization and land conservation should occur. General plans, community plans, and other related plans work together to guide the type, location, and intensity of development. The following discussion identifies applicable plans by jurisdiction and describes the general policy direction for each of those plans. Descriptions of specific general plan land use designations for each county can be found in Appendix A.

The primary method by which land use is regulated in the Delta is through county general plan policies. County general plans include provisions to protect farmland, address sea level rise and climate change (Solano County, for example), preserve and restore natural habitat, and concentrate future growth within existing city/community boundaries. However, county general plans but may not fully address upcoming issues such as future infrastructure threats or ecosystem restoration needs that are called for by the DPC, Biological Opinions, and state agency plans with jurisdiction in the Delta.

In addition, current county general plan policies coupled with the existing land uses in these communities put possible land uses in competition with each other. For example, one county's priority to preserve agricultural uses above other land uses indicates that uses such as ecosystem restoration must only occur



if it is not a threat to agricultural productivity. The counties tend to focus their planning inward, looking within their boundaries to determine the best uses for their lands and determine how those uses further the goals set forth by each individual county. Although the counties' general plans do not wholly ignore the concept of region-wide planning in the Delta, most of the jurisdictions do not make regional planning the main focus of their land use designations or policy direction. The land uses in each of the counties described below reflects these values and further reinforces the compartmentalization of planning in the Delta.

The following is a summary of general plan direction in the Delta counties distilled directly from the general plan document themselves. This section is not an exhaustive examination of the current planning goals and rules of any of the other counties in the Delta. However, an examination of all the general plans for the five counties, plus examination of other documents, suggests that there may be differences between current State law, which states that the coequal goals and the objective to achieve them are mandatory, and current county land use/planning documents. The presentation of general plan policies is divided into two parts. First is a table summarizing a review and comparison of general plan policies for their relationships and conformance to Delta Resource Management Plan policies by topics (Table 4-2).

Second is a description of county general plan policies, including policies relevant to the Delta. The general plan policy summaries are intended to provide the reader with a general understanding of the policy direction, recommendations, and guidance as contained in each county's general plan. Any descriptions of general plan policies that use words such as "should" or are otherwise directive in nature are not the opinions of the author of this Land Use White Paper but are the language used in the general plans themselves.

**Table 4-2**

**Comparison of DPC Land Use and Resource Management Plan and County General Plan Policies**

| <b>DPC Land Use and Resource Management Plan Policies</b>  | <b>Contra Costa</b> | <b>Sacramento</b> | <b>San Joaquin</b> | <b>Solano</b> | <b>Yolo</b> |
|--|---------------------|-------------------|--------------------|---------------|-------------|
| <b>Land Use</b>  |                     |                   |                    |               |             |
| P-1. The rich cultural heritage, strong agricultural/economic base, unique recreational resources, and biological diversity of the Delta shall be preserved and recognized in public/private facilities, such as museums, recreational trails, community parks, farm stands, community centers, and water access facilities within the Delta.  | ☐                   | ☐                 | ☐                  | ☐             | ☐           |
| P-2. Local government general plans, as defined in Government Code Section 65300 et seq., and zoning codes shall continue to promote and facilitate agriculture and agriculturally supporting commercial and industrial uses as the primary land uses in the Primary Zone; recreation and natural resources land uses shall be supported in appropriate locations and where conflicts with agricultural land uses or other beneficial uses can be minimized. | ●                   | ●                 | ☐                  | ●             | ☐           |

Table 4-2

Comparison of DPC Land Use and Resource Management Plan and County General Plan Policies

| DPC Land Use and Resource Management Plan Policies  | Contra Costa | Sacramento | San Joaquin | Solano | Yolo |
|---|--------------|------------|-------------|--------|------|
| P-3. New non-agriculturally oriented residential, recreational, commercial, habitat, restoration, or industrial development shall ensure that appropriate buffer areas are provided by those proposing new development to prevent conflicts between any proposed use and existing adjacent agricultural parcels. Buffers shall adequately protect integrity of land for existing and future agricultural uses and shall not include uses that conflict with agricultural operations on adjacent agricultural lands. Appropriate buffer setbacks shall be determined in consultation with local Agricultural Commissioners, and shall be based on applicable general plan policies and criteria included in Right-to-Farm Ordinances adopted by local jurisdictions.   | ●            | ●          | □           | □      | □    |
| P-4. Direct new non-agriculturally oriented non-farmworker residential development within the existing unincorporated towns (Walnut Grove, Clarksburg, Courtland, Hood, Locke, and Ryde).   | □            | ●          | □           | □      | ●    |
| P-5. Local government general plans shall address criteria under which general plan amendments in the Primary Zone will be evaluated under Public Resources Code Section 29763.5. Proposed amendments to local government general plans for areas in the Primary Zone shall be evaluated in terms of consistency of the overall goals and policies of the Land Use and Resource Management Plan.  | ○            | ○          | ○           | ○      | ○    |
| P-6. Subsidence control shall be a key factor in evaluating land use proposals. Encourage agricultural, land management, recreational, and wildlife management practices that minimize subsidence of peat soils. Local governments should utilize studies of agricultural and land management methods that minimize subsidence and should assist in educating landowners and managers as to the value of utilizing these methods.   | ●            | ○          | □           | ○      | ○    |
| P-7. New structures shall be set back from levees and areas that may be needed for future levee expansion consistent with local reclamation district regulations and, upon adoption, with the requirements to be identified in the California Department of Water Resources Central Valley Flood Control Plan.  | □            | ○          | ○           | ○      | ○    |
| P-8. Local government policies regarding mitigation of adverse environmental impacts under the California Environmental Quality Act may allow mitigation beyond county boundaries, if acceptable to reviewing fish and wildlife agencies and with approval of the recipient jurisdiction, for example in approved mitigation banks or in the case of agricultural loss to mitigation. Mitigation in the Primary Zone for loss of agricultural lands in the Secondary Zone may be appropriate if the mitigation program supports continued farming in the Primary Zone. California Government Code Section 51256.3 (Assembly Bill 797) specifically allows an agricultural conservation easement located within the Primary or Secondary Zone of the Delta to be related to Williamson Act contract rescissions in any other portion of the secondary zone without respect to County boundary limitations. | ○            | □          | □           | ○      | ○    |

Table 4-2

Comparison of DPC Land Use and Resource Management Plan and County General Plan Policies

| DPC Land Use and Resource Management Plan Policies   | Contra Costa | Sacramento | San Joaquin | Solano | Yolo |
|--|--------------|------------|-------------|--------|------|
| P-9. The implementation of the policies contained in the resource management plan shall not be achieved through the exercise of the power of eminent domain unless requested by the landowner.   | ○            | ○          | ○           | ○      | ○    |
| P-10. Maintain sites for the storage of dredged material from channels within the Delta and discourage the conversion of existing sites to other uses, as appropriate. Soil that is suitable for levee rehabilitation and raising Delta lowlands should remain within the Delta.   | ○            | ○          | X           | ○      | ○    |
| P-11. Local governments may develop programs to cluster residential units that allow property owners to engage in limited property development in order to ensure the efficient use and conservation of agricultural lands, support open space values, and protect sensitive environmental areas in the Primary Zone. Clustered development occurs when contiguous or non-contiguous parcels are developed to cluster lots for residential use. The purpose of clustered development is to provide a mechanism to preserve agricultural land and open space, to locate housing in areas that can readily be served by public services and utilities, and provide the agricultural community an alternative to transfer of development rights. Clustered development programs shall ensure that the number of clustered lots created does not exceed the allowable density requirement for the zoning of the sum of the parcels. Clustered development may only be used one time. Neither the clustered lots nor the remainder lots may be further subdivided. Residential development shall be consistent with local General Plan policies and zoning regulations and standards. | ●            | ●          | ○           | ●      | ●    |
| P-12. Local governments may develop transfer of development rights (TDR) programs that allow land owners to transfer the development right from one parcel of land to another. The purpose of these TDR programs would be to ensure the efficient use and conservation of agricultural lands, to support open space values, and to protect sensitive environmental areas within the Primary Zone. This purpose would be achieved by relocating development rights within the Primary Zone to more suitable areas such as adjacent to or within existing urban areas within or outside of the Primary Zone, or to provide expanded opportunities for affordable farm worker housing. TDR programs shall ensure that the transferred development density does not exceed the development density identified for the zoning for the sending parcel, and that any farm worker housing is restricted and regulated for that purpose. The land upon which the development rights are transferred from would be restricted with a permanent conservation easement. Receiving areas must have the infrastructure capacity, public services and utilities to absorb the new development.  | ○            | ◻          | ○           | ◻      | ○    |
| P-13. Support the implementation of appropriately located agricultural labor camps and housing that serve agricultural operations, which are constructed and sited consistent with Sections 17021.5 and 17021.6 of the California Health and Safety Code and consistent with the requirements of local building codes.   | ○            | ○          | ○           | ◻      | ○    |

Table 4-2

Comparison of DPC Land Use and Resource Management Plan and County General Plan Policies

| DPC Land Use and Resource Management Plan Policies   | Contra Costa | Sacramento | San Joaquin | Solano | Yolo |
|--|--------------|------------|-------------|--------|------|
| P-14. The conversion of an agricultural parcel, parcels, and/or an agricultural island for water impoundment, including reservoirs, water conveyance or wetland development may not result in the seepage of water onto or under the adjacent parcel, parcels, and/or island. These conversions shall mitigate the risks and adverse effects associated with seepage, levee stability, subsidence, and levee erosion, and shall be consistent with the goals of this Plan.   | ○            | ○          | ◻           | ○      | ○    |
| <b>Agriculture</b>   |              |            |             |        |      |
| P-1. Support and encourage agriculture in the Delta as a key element in the State's economy and in providing the food supply needed to sustain the increasing population of the State, the Nation, and the world.  | ●            | ●          | ●           | ●      | ●    |
| P-2. Conversion of land to non-agriculturally oriented uses should occur first where productivity and agricultural values are lowest.  | ◻            | ◻          | ◻           | ◻      | ◻    |
| P-3. Promote recognition of the Delta as a place by educating individuals about the rich agricultural heritage, the unique recreational resources, the biological diversity, and the ongoing value of maintaining a healthy agricultural economy in the Delta.   | ○            | ●          | ○           | ●      | ○    |
| P-4. Support agricultural programs that maintain economic viability and increase agricultural income in accordance with market demands, including but not limited to wildlife-friendly farming, conservation tillage and non-tillage.  | ◻            | ◻          | ◻           | ◻      | ◻    |
| P-5. Local governments shall encourage implementation of the necessary plans and ordinances to: maximize agricultural parcel size; reduce subdivision of agricultural lands; protect agriculture and related activities; protect agricultural land from conversion to non-agriculturally oriented uses. An optimum package of regulatory and incentive programs could include: (1) an urban limit line; (2) minimum parcel size consistent with local agricultural practices and needs; (3) strict subdivision regulations regarding subdivision of agricultural lands to ensure that subdivided lands will continue to contain agriculturally oriented land uses; (4) require adequate buffers between agricultural and non-agricultural land uses particularly residential development outside but adjacent to the Primary Zone; (5) an agriculture element of the general plan; (6) a Right-to-Farm ordinance; and (7) a conservation easement program. | ●            | ●          | ●           | ●      | ●    |
| P-6. Encourage acquisition of agricultural conservation easements from willing sellers as mitigation for projects within each county. Promote use of environmental mitigation in agricultural areas only when it is consistent and compatible with ongoing agricultural operations and when developed in appropriate locations designated on a countywide or Delta-wide habitat management plan.   | ◻            | ●          | ○           | ●      | ●    |
| P-7. Encourage management of agricultural lands which maximize wildlife habitat seasonally and year-round, through techniques such as fall and winter flooding, leaving crop residue, creation of mosaic of small grains and flooded areas, wildlife friendly farming, controlling predators, controlling poaching, controlling public access, and others.   | ◻            | ◻          | ◻           | ●      | ◻    |

Table 4-2

Comparison of DPC Land Use and Resource Management Plan and County General Plan Policies

| DPC Land Use and Resource Management Plan Policies  | Contra Costa | Sacramento | San Joaquin | Solano | Yolo |
|---|--------------|------------|-------------|--------|------|
| P-8. Encourage the protection of agricultural areas, recreational resources and sensitive biological habitats, and the reclamation of those areas from the destruction caused by inundation.  | ☐            | ☐          | ☐           | ☐      | ☐    |
| P-9. Support agricultural tourism and value-added agricultural production as a means of maintaining the agricultural economy of the Delta.  | ○            | ●          | ○           | ○      | ●    |
| <b>Natural Resources</b>  |              |            |             |        |      |
| P-1. Preserve and protect the natural resources of the Delta. Promote protection of remnants of riparian and aquatic habitat. Encourage compatibility between agricultural practices, recreational uses, and wildlife habitat.  | ●            | ○          | ☐           | ☐      | ○    |
| P-2. Encourage farmers to implement management practices to maximize habitat values for migratory birds and other wildlife. Appropriate incentives, such as purchase of conservation easements from willing sellers or other actions, should be encouraged.   | ○            | ☐          | ○           | ☐      | ☐    |
| P-3. Lands managed primarily for wildlife habitat should be managed to maximize ecological values. Appropriate programs, such as "Coordinated Resource Management and Planning" (Public Resources Code Section 9408(c)) should ensure full participation by local government and property owner representatives.  | ☐            | ☐          | ☐           | ☐      | ☐    |
| P-4. Support the non-native invasive species control measures being implemented by the California Department of Fish and Game, the California Department of Boating and Waterways, the California Emergency Management Agency, the California Department of Food and Agriculture, the State Water Resources Control Board, the Central Valley and San Francisco Bay Regional Water Quality Control Boards, and the Agricultural Commissioners for the five Delta Counties (Yolo, Solano, Sacramento, San Joaquin, and Contra Costa), which include controlling the arrival of new species into the Delta. | ○            | ○          | ○           | ○      | ○    |
| P-5. Preserve and protect the viability of agricultural areas by including an adequate financial mechanism in any planned conversion of agricultural lands to wildlife habitat for conservation purposes. The financial mechanism shall specifically offset the loss of local government and special district revenues necessary to support public services and infrastructure.   | ○            | ○          | ○           | ○      | ○    |
| P-6. Support the implementation of appropriate buffers, management plans and/or good neighbor policies (e.g. safe harbor agreements) that among other things, limit liability for incidental take associated with adjacent agricultural and recreational activities within lands converted to wildlife habitat to ensure the ongoing agricultural and recreational operations adjacent to the converted lands are not negatively affected.  | ☐            | ☐          | ☐           | ○      | ○    |
| P-7. Incorporate, to the maximum extent feasible, suitable and appropriate wildlife protection, restoration and enhancement on publicly owned land as part of a Delta-wide plan for habitat management.   | ☐            | ○          | ○           | ○      | ☐    |

Table 4-2

Comparison of DPC Land Use and Resource Management Plan and County General Plan Policies

| DPC Land Use and Resource Management Plan Policies   | Contra Costa | Sacramento | San Joaquin | Solano | Yolo |
|--|--------------|------------|-------------|--------|------|
| P-8. Promote ecological, recreational and agricultural tourism in order to preserve the cultural values and economic vitality that reflect the history, natural heritage and human resources of the Delta including the establishment of National Heritage Area designations.  | ○            | ▣          | ▣           | ▣      | ▣    |
| P-9. Protect and restore ecosystems and adaptively manage them to minimize impacts from climate change and other threats and support their ability to adapt in the face of stress.   | ○            | ○          | ○           | ▣      | ○    |
| P-10. Ensure that design, construction, and management of any flooding program to provide seasonal wildlife and aquatic habitat on agricultural lands, duck club lands and additional seasonal and tidal wetlands, shall incorporate "best management practices" to minimize vectors including mosquito breeding opportunities, and shall be coordinated with the local vector control districts, (each of the four vector control districts in the Delta provides specific wetland/mosquito management criteria to landowners within their district.) | ○            | ○          | ○           | ▣      | ○    |
| <b>Recreation and Access</b>   |              |            |             |        |      |
| P-1. Ensure appropriate planning, development and funding for expansion, ongoing maintenance and supervision of existing public recreation and access areas.   | ▣            | ▣          | ●           | ▣      | ▣    |
| P-2. Encourage expansion of existing privately owned, water-oriented recreation and access facilities that are consistent with local General Plans, zoning regulations and standards.  | ▣            | ▣          | ▣           | ▣      | ▣    |
| P-3. Assess the need for new regional public and private recreation and access facilities to meet increasing public need, and ensure that any new facilities are prioritized, developed, maintained and supervised consistent with local, state, and federal laws and regulations. Ensure that adequate public services are provided for all existing, new, and improved recreation and access facilities.   | ○            | ○          | ▣           | ○      | ○    |
| P-4. Encourage new regional recreational opportunities, such as Delta-wide trails, which take into consideration environmental, agricultural, infrastructure, and law enforcement needs, and private property boundaries. Also, encourage opportunities for water, hiking, and biking trails.  | ▣            | ▣          | ▣           | ▣      | ▣    |
| P-5. Encourage provision of publicly funded amenities such as picnic tables and boat-in destinations in or adjacent to and complimentary to private facilities, particularly if the private facility will agree to supervise and manage such amenities, thus lowering the long-term cost to the public.  | ▣            | ▣          | ▣           | ○      | ○    |
| P-6. Support multiple uses of Delta agricultural lands, such as seasonal use for hunting and provision of wildlife habitat.  | ▣            | ○          | ○           | ▣      | ○    |
| P-7. Support improved access for bank fishing along State highways, county roads, and other appropriate areas where safe and adequate parking, law enforcement, waste management and sanitation facilities, and emergency response can be provided and where proper rights-of-access have been acquired.   | ○            | ○          | ▣           | ○      | ○    |



Table 4-2

Comparison of DPC Land Use and Resource Management Plan and County General Plan Policies

| DPC Land Use and Resource Management Plan Policies   | Contra Costa | Sacramento | San Joaquin | Solano | Yolo |
|--|--------------|------------|-------------|--------|------|
| P-8. Ensure, for the sake of the environment and water quality, the provision of appropriate restroom, pump-out and other sanitation and waste management facilities at new and existing recreation sites, including marinas; encourage the provision of amenities including but not limited to picnic tables and boat-in destinations.  | ▣            | ▣          | ▣           | ○      | ○    |
| P-9. Encourage the development of funding and implementation strategies by appropriate governing bodies for the surrender and/or removal of water-borne debris and dilapidated, unseaworthy and abandoned vessels from waterways, to minimize navigational and environmental hazards.  | ○            | ○          | ○           | ○      | ○    |
| P-10. Promote and encourage Delta-wide communication, coordination, and collaboration on boating and waterway-related programs including but not limited to marine patrols, removal of debris and abandoned vessels, invasive species control and containment, clean and safe boating education and enforcement, maintenance of existing anchorage, mooring and berthing areas, and emergency response in the Delta.   | ○            | ○          | ○           | ○      | ○    |
| P-11. Recognizing existing laws, encourage establishment of Delta-wide law enforcement protocols on local public nuisance and safety issues, such as trespassing, littering, and theft.  | ○            | ○          | ▣           | ○      | ○    |
| P-12. Support and encourage programs for waterways that provide opportunities for safe boating and recreation, including removal of floating and sunken debris and abandoned vessels from Delta waterways in collaboration with appropriate agencies.  | ○            | ○          | ○           | ○      | ○    |
| P-13. Support the development of a strategic plan, in consultation with all law enforcement agencies having jurisdiction in the Delta, to improve law enforcement and the use of available resources to ensure an adequate level of public safety. The strategic plan shall identify resources to implement the plan.  | ○            | ○          | ○           | ○      | ○    |
| <b>Water</b>   |              |            |             |        |      |
| P-1. State, federal and local agencies shall be strongly encouraged to preserve and protect the water quality of the Delta both for in-stream purposes and for human use and consumption.  | ▣            | ▣          | ▣           | ▣      | ▣    |
| P-2. Ensure that Delta water rights and water contracts are respected and protected, including area of origin water rights and riparian water rights.  | ○            | ○          | ○           | ○      | ○    |
| <b>Levees</b>  |              |            |             |        |      |
| P-1. Local governments shall carefully and prudently carry out their responsibilities to regulate new construction within flood hazard areas to protect public health, safety, and welfare. These responsibilities shall be carried out consistent with applicable regulations concerning the Delta, as well as the statutory language contained in the Delta Protection Act of 1992. Increased flood protection shall not result in residential designations or densities beyond those allowed under zoning and general plan designations in place on January 1, 1992, for lands in the Primary Zone. | ▣            | ▣          | ▣           | ▣      | ▣    |

Table 4-2

Comparison of DPC Land Use and Resource Management Plan and County General Plan Policies

| DPC Land Use and Resource Management Plan Policies   | Contra Costa | Sacramento | San Joaquin | Solano | Yolo |
|--|--------------|------------|-------------|--------|------|
| P-2. Support programs for emergency levee repairs and encourage coordination between local, State, and federal governments. The programs may include but are not limited to: interagency agreements and coordination; definition of an emergency; designation of emergency funds; emergency contracting procedures; emergency permitting procedures; and other necessary elements.   | ○            | ○          | ○           | ■      | ○    |
| P-3. Support efforts to address levee encroachments that are detrimental to levee maintenance.   | ○            | ○          | ○           | ○      | ○    |
| P-4. Support funding assistance for existing unincorporated towns within the Delta to improve levees up to a 200-year flood protection level.  | ■            | ■          | ○           | ○      | ■    |
| P-5. Support stockpiling rock in the Delta for levee emergency response.   | ○            | ○          | ○           | ○      | ○    |
| P-6. Support a multi-year funding commitment to maintain and restore both project and non-project levees in the Delta.   | ■            | ○          | ○           | ■      | ■    |
| P-7. Encourage the beneficial reuse of dredged material, as appropriate, for levee maintenance and rehabilitation, and the maintenance of instream flows. Support and advocate for the Delta Long-Term Management Strategy (LTMS).   | ○            | ○          | ■           | ○      | ○    |
| P-8. Seek funding for and support programs to make cost-effective levee investments in order to preserve the economy and character of the Delta.   | ○            | ○          | ○           | ○      | ○    |
| P-9. Support a minimum Delta-specific levee design standard as established by state and federal regulations.   | ○            | ○          | ○           | ○      | ○    |
| <b>Utilities and Infrastructure</b>  |              |            |             |        |      |
| P-1. Impacts associated with construction of transmission lines and utilities can be mitigated by locating new construction in existing utility or transportation corridors, or along property lines, and by minimizing construction impacts. Before new transmission lines are constructed, the utility should determine if an existing line has available capacity. To minimize impacts on agricultural practices, utility lines shall follow edges of fields. Pipelines in utility corridors or existing rights-of-way shall be buried to avoid adverse impacts to terrestrial wildlife. Pipelines crossing agricultural areas shall be buried deep enough to avoid conflicts with normal agricultural or construction activities. Utilities shall be designed and constructed to minimize any detrimental effect on levee integrity or maintenance, agricultural uses and wildlife within the Delta. Utilities shall consult with communities early in the planning process for the purpose of creating an appropriate buffer from residences, schools, churches, public facilities and inhabited marinas. | ■            | ■          | ■           | ■      | ○    |

Table 4-2

Comparison of DPC Land Use and Resource Management Plan and County General Plan Policies

| DPC Land Use and Resource Management Plan Policies   | Contra Costa | Sacramento | San Joaquin | Solano | Yolo |
|--|--------------|------------|-------------|--------|------|
| P-2. Ensure that new houses built in the Delta agricultural areas but outside of the Delta's unincorporated towns continue to be served by independent potable water and wastewater treatment facilities and/or septic systems. Agricultural uses that require wastewater treatment shall provide adequate infrastructure improvements or pay to expand existing facilities, and not overburden the existing limited community resources. The appropriate governing body shall ensure that new or expanded construction of agriculturally oriented wastewater disposal systems meet the appropriate standards/conditions and are not residentially growth inducing. Independent treatment facilities should be monitored to ensure no cumulative adverse impact to groundwater supplies. | ■            | ○          | ○           | ○      | ○    |
| P-3. Ensure that new municipal sewage treatment facilities (including storage ponds) that support development or business outside of the Delta Primary Zone are not located within the Delta Primary Zone. The Rio Vista project, as described in the adopted Final Environmental Impact Report for such project, and the Ironhouse Sanitary District use of Jersey Island for disposal of treated wastewater and biosolids are exempt from this policy.   | ○            | ○          | ■           | ○      | ○    |
| P-4. Encourage recycling programs for metals, glass, paper, cardboard, and organic materials in order to minimize waste generation. Recycling facilities for these materials should be suitably located to serve Delta residents, visitors, and businesses. High groundwater tables and subsiding soil make the Delta an inappropriate location for solid waste disposal.  | ○            | ○          | ○           | ○      | ○    |
| P-5. Maintain roads within the Delta to serve the existing agricultural uses and supporting commercial uses, recreational users, and Delta residents. Promote the maintenance and enhancement of major thoroughfares already used as cross-Delta corridors.  | ■            | ■          | ■           | ■      | ■    |
| P-6. Allow air transportation in the Delta to continue to serve Delta residents and agriculture-related businesses. Due to subsidence, transmission lines, high winds, fog, and high raptor and waterfowl use, the Primary Zone is not an appropriate location for new or expanded general aviation airports.  | ○            | ○          | ○           | ○      | ○    |
| P-7. Encourage the provision of infrastructure for new water, recreational, and scientific research facilities.  | ■            | ■          | ○           | ■      | ○    |

● = One or more county general plan policies align very closely with the LRMP policy

■ = County general plan policies address the LRMP policy to an extent

○ = No county general plan policies address the LRMP policy

X = County general plan policies are inconsistent with the LRMP policy

# Sacramento County

## Sacramento County General Plan

Sacramento County encompasses approximately 775 square miles (496,083 acres) and is located in the middle of the 400-mile-long Central Valley. The county is bordered by Contra Costa and San Joaquin counties to the south, Amador and El Dorado counties to the east, Placer and Sutter counties to the north, and Yolo and Solano counties to the west. Sacramento County extends from the Delta between the Sacramento and San Joaquin rivers north to about 10 miles beyond the State Capitol building and east to the Sierra Nevada foothills.



Sacramento County is currently revising its General Plan. A draft General Plan dated April 13, 2009, is available for public review and is being vetted by the County Planning Commission and Board of Supervisors. It is expected that the Board will adopt the updated General Plan by the end of 2010. For this analysis, the draft General Plan policies dated April 13, 2009, will be discussed. Although policy language is still being finalized by the Board, it is anticipated that policy direction relating to land use and development in the Delta would not change from the 2009 policy document.

The legal Delta within Sacramento County contains 118,400 acres of land, approximately 19 percent of the county total.

## Land Use Designations

Sacramento County designates land within the Primary Zone as Low Density Residential, Industrial Intensive, Recreation, Agricultural Cropland, and Agricultural-Residential. The communities of Courtland, Freeport, Hood, Locke, and Walnut Grove are within the Delta Primary Zone. The community of Courtland is located in the north Delta, along SR 160, approximately 18 miles south of Sacramento. Like other Delta communities along SR 160, its primary geographic feature is the Sacramento River. Freeport is located just south of the City of Sacramento on the east shore of the Sacramento River. The community remains physically separated from adjacent urban development in the City of Sacramento and Sacramento County because of the barriers presented by I-5, recently constructed levees, and the Sacramento River. Hood is a small, rural settlement located on the east side of the Sacramento River along SR 160, approximately 5 miles south of Freeport. The community of Locke is located along SR 160, immediately north of Walnut Grove, approximately 23 miles south of downtown Sacramento, and 5.5 miles south of Courtland. The community is almost indistinguishable from Walnut Grove because it is separated by only the Delta Cross Channel. The community of Walnut Grove is located along SR 160 in the central part of the Delta, approximately 24 miles south of downtown Sacramento and 6 miles south of Courtland. It is built primarily on the east side of the Sacramento River, although additional areas on the west side of the river are also closely tied to the historical center of Walnut Grove.







## *Policy Direction*

There are some important overarching policies that are applicable not only to the more urbanized areas of the county, but also to the rural areas such as the unincorporated communities and agriculturally dominated areas. New growth should be directed to previously urbanized areas, planned growth areas, and strategically located new growth areas to promote efficient use of land, to reduce urban sprawl and its impacts, to preserve valuable environmental resources, and to protect agricultural and rangeland operations. Revitalization efforts and new urban developments should occur within existing communities with a focus toward infill sites. Expansion of urban uses in rural areas should be limited to the established Delta communities of Freeport, Hood, Courtland, Locke, and Walnut Grove and to specific small expansions that support the agriculturally and recreationally based economies of the Delta. Industries allowed in agricultural areas should be restricted to activities that involve the storage, primary processing, or primary manufacturing of raw agricultural materials provided that the uses are consistent with the zoning code.

The Circulation Element sets a high priority on preserving and enhancing designated scenic highways and expanding the scenic highway system in the County. SR 160, which is within the Primary Zone, is one of the identified scenic highways in the county that should continue to be protected and enhanced.

Farming next to urban areas often results in complaints regarding pesticides, dust, smoke, odors, or noise generated by accepted farming practices. Sacramento County has adopted a right-to-farm ordinance to provide legal assurance that established agricultural operations are allowed to continue, and to inform residents of areas zoned or designated for agriculture that they may be subject to inconvenience or discomfort resulting from accepted agricultural operations. This ordinance does not, however, prevent residents of farming areas from complaining about such inconvenience or discomfort.

The county's General Plan prohibits recreational uses on prime, statewide importance, unique, or local farmland outside the Urban Services Boundary where the use would impede agricultural practices. The General Plan also states that agriculturally productive Delta soils should be protected from the effects of oxidation, shrinkage, and erosion. Participation in resource conservation districts is also encouraged.

Habitat mitigation helps to minimize the impacts on natural resources from development activities either through replacement of a resource or via other means of compensation. Mitigation is a tool that is widely used by federal, State, and local agencies, as well as being required through the CEQA process. According to the General Plan, mitigation actions should maintain species and habitat heterogeneity by providing permanently protected areas across a species' range. Mitigation should occur within close proximity to the impact to protect that portion of a species population that is being impacted. By preserving land within Sacramento County, valuable open space will be provided for the enjoyment and use of citizens that live within the county. In addition, the General Plan specifies that, in identifying resources for mitigation, it is important to ensure that these resources are properly restored and maintained. Habitat restoration plans help to establish ongoing monitoring and management for these mitigation resources.

To protect the natural character of the floodplain, the General Plan requires that programs be implemented that control or eliminate fill within the 100-year floodplain. The objective is to rely predominantly on the natural character of the floodplain to carry future flood flows. In addition, developing an enforcement program to help limit illegal fill will also assist in preserving the floodplains.

In an effort to increase natural values of channelized sections of rivers and streams, some of which are concrete lined, the General Plan restricts activities in these waterways to planting and maintaining native vegetation and stabilizing eroding banks. To implement restoration procedures, concrete channels should be identified, resource inventories conducted, and restoration plans developed. Funding for restoration in urbanizing areas should come from developer fees or from public and private grants.



The General Plan also expresses the county’s intent to participate through and coordinate with the Sacramento Area Flood Control Agency and other agencies in obtaining federal authorization for construction of flood control projects along the Sacramento and American rivers and the immediate connection of local internal streams to these rivers. Such projects should provide 200-year flood protection for urban areas.

## South Sacramento Habitat Conservation Plan

The South Sacramento Habitat Conservation Plan (SSHCP) is a regional approach to addressing issues related to urban development, habitat conservation, and agricultural protection. The SSHCP will consolidate environmental efforts to protect and enhance wetlands (primarily vernal pools) and upland habitats to provide ecologically viable conservation areas. It will also minimize regulatory hurdles and streamline the permitting process for development projects. The SSHCP will cover 40 different species of plants and wildlife including 10 that are state or federally listed as threatened or endangered. The SSHCP will be an agreement between State and federal wildlife and wetland regulators and local jurisdictions, which will allow land owners to engage in the “incidental take” of listed species (i.e., to destroy or degrade habitat) in return for conservation commitments from local jurisdictions. The options for securing these commitments are currently being developed and will be identified prior to the adoption of the SSHCP. The geographic scope of the SSHCP includes U.S. Highway 50 to the north, I-5 to the west, the Sacramento County line with El Dorado and Amador counties to the east, and San Joaquin County to the south. The study area excludes the City of Sacramento, the City of Folsom and Folsom’s Sphere of Influence, the Delta, and the Sacramento County community of Rancho Murrieta. Sacramento County is partnering with the incorporated cities of Rancho Cordova, Galt, and Elk Grove, as well as the Sacramento Regional County Sanitation District and Sacramento County Water Agency, to further advance the regional planning goals of the SSHCP (Sacramento County, 2010).

Figure 4-2 shows the county’s General Plan Land Use Diagram.

## Yolo County

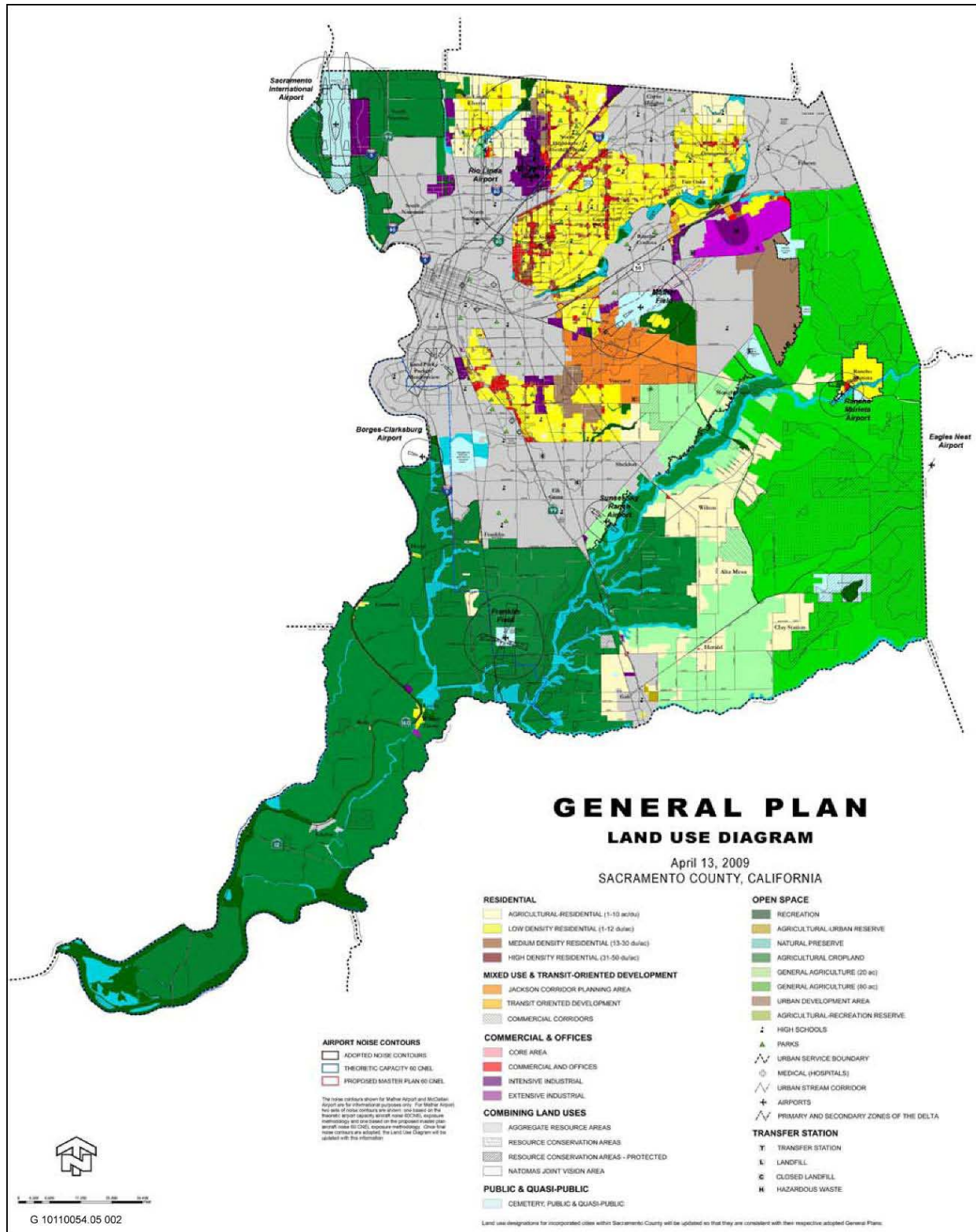
### Yolo County General Plan

Yolo County is bordered by Solano County on the south, Sacramento County and Sutter County to the east, Colusa County to the north, and Lake County and Napa County to the west. The county’s total size is 653,549 acres (or 1,021 square miles). This includes both the incorporated area (the cities of Davis, West Sacramento, Winters, and Woodland), which totals 32,325 acres, and the unincorporated area, which totals 621,224 acres. The four cities have independent land use authority from the county and are not a part of the Yolo County General Plan. The unincorporated county contains several communities, including Capay, Clarksburg, Dunnigan, Esparto, Guinda, Knights Landing, Madison, Monument Hills, Rumsey, Yolo, and Zamora. All of these unincorporated communities are under the jurisdiction of Yolo County and are considered in the Yolo County General Plan.

### *Land Use Designations*

Yolo County designates land within the Primary Zone as Agriculture (AG) and Open Space (OS), with an Agricultural District Overlay (ADO) and a Delta Protection Overlay (DPO) (see Figure 4-3 and Appendix A). However, the community of Clarksburg is also within the Primary Zone and has the following land use designations: Residential Rural (RR), Residential Low (RL), Residential Medium (RM), Residential High (RH), Industrial (IN), Commercial Local (CL), and Public and Quasi-Public (PQ). Clarksburg also has an established growth boundary. Figure 4-3 shows Yolo County’s General Plan Land Use Diagram.

1 **Figure 4-2**  
2 **Sacramento County General Plan Land Use Designations**  
3 **Source: Sacramento County General Plan**



## Policy Direction

Yolo County approved its updated General Plan in November 2009. The Preferred Land Use Alternative focuses on:

- ◆ The continuing primacy of agriculture and related endeavors throughout the county, particularly as related to economic development and job creation
- ◆ Standards for sustainability, community identity, rural service standards, job-housing match and balance, energy conservation, protection of natural resources, smart growth, community health and safety, and efficient and responsible transportation options
- ◆ Limited residential and other related community development primarily within the existing towns and only under certain sustainable conditions
- ◆ Use of community-based planning processes for the development of agricultural districts and specific plans



The County has adopted the following strategies:

- ◆ Modest managed growth within specified existing unincorporated communities, where accompanied by improvements to existing infrastructure and services, as well as by suitable new infrastructure and services
- ◆ Opportunities for revenue-producing and job-producing agricultural, industrial and commercial growth in limited locations and along key transportation corridors
- ◆ Thresholds that allow for effective and efficient provision of services, consistent with rural values and expectations
- ◆ New emphasis on community and neighborhood design requirements that reflect “smart growth” principles and complement the character of existing developed areas



The Yolo County General Plan policies specifically recognize the balance required to ensure compatibility of land uses and decision-making with applicable policies of the Land Use and Resource Management Plan of the Delta Protection Commission. Land use in the Primary and Secondary Zones of the Sacramento-San Joaquin Delta must not only be consistent with this General Plan, they must be consistent with the Land Use and Resource Management Plan, as adopted by the DPC. The General Plan also seeks to continue active involvement with State and regional efforts to establish policy, regulation, and management for the Delta and to promote the economic and social sustainability of the town of Clarksburg, the viability of the Agricultural District, the habitat needs of the Yolo Natural Heritage Program, and the water resources needed for the success of each of these efforts.

A number of policies seek to preserve the rural character of the county by protecting the aesthetic appeal of the agricultural and open space landscape present throughout the county; reinforcing community

growth boundaries through the use of greenbelts, buffers, conservation easements, and community separators; and protecting formally designated scenic highways as well as routes that traverse a scenic corridor, water feature, open space area or other interesting or unique areas, both urban and rural settings, and may include bikeways, hiking and riding trails, and pedestrian way.

The conversion or division of agricultural lands to nonagricultural uses is strongly discouraged. Existing agricultural lands are protected from urban encroachment by limiting the extension of urban service facilities and infrastructure. Implementation of a number of additional tools such as Williamson Act, Farmland Preservation Zones (implemented through the Williamson Act), conservation easements, an Agricultural Lands Conversion Ordinance and the Right-to-Farm Ordinance also help preserve agricultural lands in the county. Areas identified as significantly contributing to groundwater recharge are protected from uses that would reduce their ability to recharge or would threaten the quality of the underlying aquifers. Water supply resources specifically used for agricultural purposes also are protected from urban development, mitigation banks and/or interests from outside the county. Collaboration with regional and watershed based groups is intended protect and preserve Yolo County's agricultural water supply.

Agriculture would continue to be the primary land use within the Primary Zone of the Delta. The General Plan also expressly includes policy direction to ensure compatibility of permitted land use activities with applicable agricultural policies of the Land Use and Resource Management Plan of the DPC. At the same time, there are also policies to support, enhance, and protect the economic and cultural vitality of heritage or legacy communities in the Delta and the existing rural economy. Expanded tourism and recreational opportunities are also encouraged.

## Yolo County Natural Heritage Program Plan

The Yolo County Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) Joint Powers Authority is currently preparing the Yolo County Natural Heritage Program (NHP) Plan (NHP Plan). The NHP Plan is a comprehensive, countywide plan designed to provide for the long-term conservation and management of sensitive and at-risk species and the habitats upon which they depend, while accommodating other important uses of the land. Specifically, the NHP Plan is intended to protect regional biodiversity by focusing on the protection of important natural communities, including agricultural landscapes that support key species and ecological processes. The NHP Plan serves as an HCP, pursuant to the federal ESA, and an NCCP under the California Natural Community Conservation Planning Act.

The purpose of the NHP Plan is to provide a systematic and holistic approach to the protection and enhancement of Yolo County's unique and important biodiversity and establish an efficient means by which various land uses occur in compliance with State and federal regulatory requirements. To that end, the NHP Plan will provide for the long-term conservation and management of sensitive species, and help resolve significant regulatory compliance issues for a range of land uses that occur in the county. The NHP Plan is also designed to accommodate appropriate economic and development activity, support the county's vibrant agricultural economy, and enhance recreational opportunities. The NHP Plan will complement a number of other local efforts aimed at advancing conservation objectives in the county.





## Yolo Bypass Management Strategy

The Yolo Bypass is a leveed, 59,000-acre floodplain on the west side of the lower Sacramento River in Yolo and Solano counties. Located within the boundaries and levees of the Sacramento River Flood Control Project, the bypass is a primary component of the flood control project and carries floodwaters from several waterways to the Delta. These waterways include the Sacramento, Feather, and American rivers and their associated tributary watersheds. Tributaries specific to the bypass include Cache and Putah creeks, Willow Slough, and the Knights Landing Ridge Cut from the Colusa Basin. The bypass provides:

- ◆ Flood conveyance for the entire Sacramento Valley (i.e., the Sacramento River Flood Control Project), including numerous communities and cities throughout the valley
- ◆ Agricultural land for a variety of farming uses
- ◆ Riparian and managed wetland habitats
- ◆ Some upland and grassland habitats

The Yolo Bypass Management Strategy seeks to balance agricultural economic viability, flood conveyance capacity, and fish and wildlife habitats.

## Solano County

### Solano County General Plan

Solano County extends from the shores of San Pablo Bay in the west to the heart of the Central Valley in the east and is centrally located between the San Francisco and Sacramento metropolitan regions. The county is bordered by Yolo County to the north and east, Sacramento County to the east, Contra Costa County to the south, and Napa County and the San Francisco Bay to the west. The county encompasses approximately 910 square miles consisting of 830 square miles of land and 80 square miles of water.

### *Land Use Designations*

Solano County designates land within the Primary Zone as Agriculture (AG) with a Resource Conservation Overlay (RCO) (see Figure 4-4 and Appendix A).



### *Policy Direction*

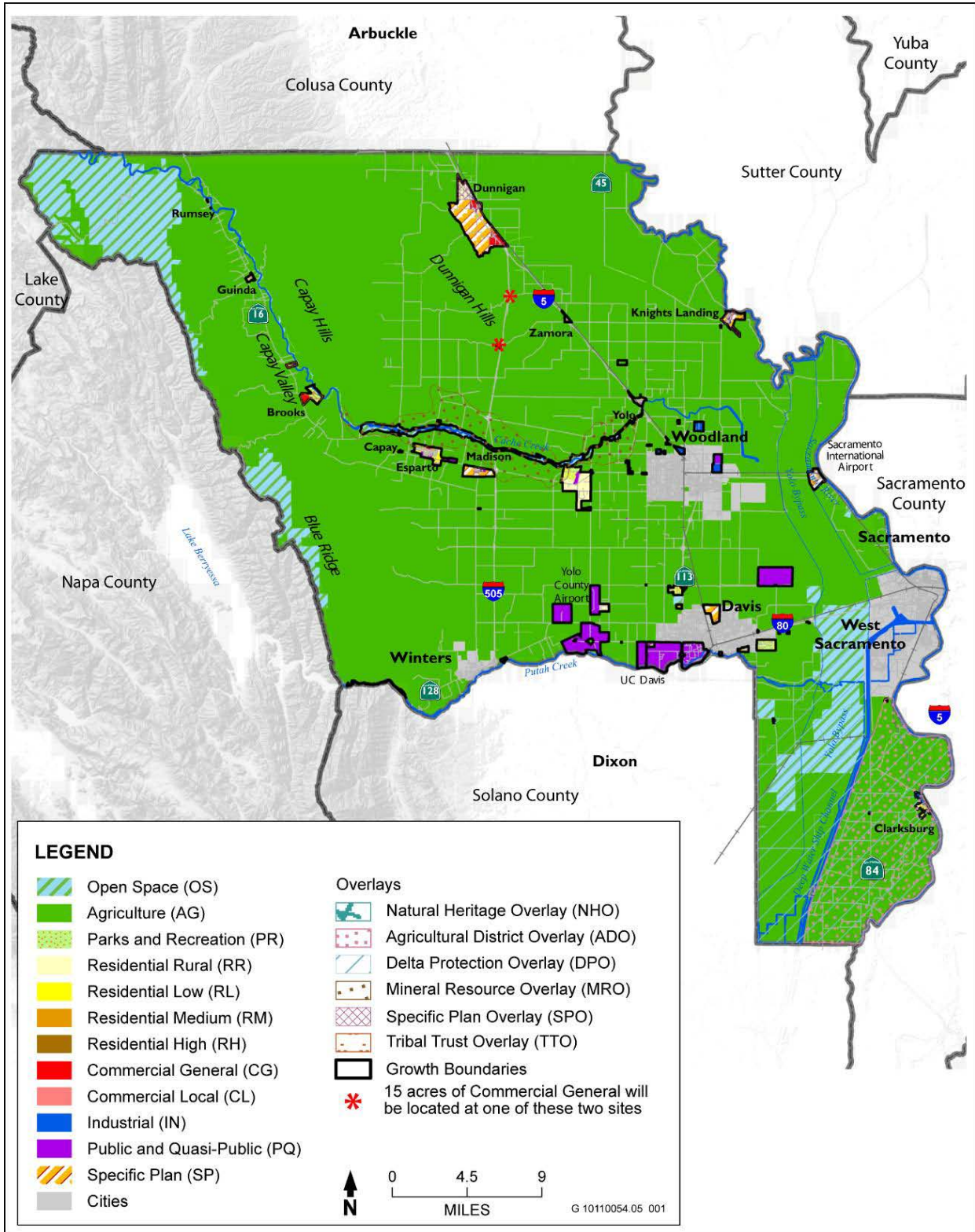
The Solano County General Plan was adopted by the Board of Supervisors on August 5, 2008, and was placed before the voters as Measure T on the November 4, 2008 ballot. Measure T was passed by the voters, confirming the approval of the new General Plan and an ordinance to amend the Orderly Growth Initiative and extend it until December 31, 2028.

The General Plan is the guide for land development and conservation in the unincorporated portions of the County. It contains the policy framework necessary to fulfill the community's vision for Solano County in 2030, a sustainable place with a thriving environment and an economy that maintains social equity. This theme of sustainability is carried throughout the plan in its goals, policies, and programs.

SECTION 4  
LOCAL PLANS AND POLICIES

DELTA AS A PLACE: LAND USE WHITE PAPER

1 **Figure 4-3**  
2 **Yolo County General Plan Land Use Diagram**  
3 *Source: Yolo County General Plan, 2009*



4  
5



The county takes the stance that urban development shall be municipal, which requires the county to coordinate with the incorporated cities to accommodate growth in the county. The primary tool that the General Plan proposes to coordinate development with the cities is the municipal service area (MSA). MSAs are used to delineate areas where the county will provide services to support development in unincorporated areas and to identify where the cities will provide services to support development through annexation. Within MSAs, the cities are responsible for providing the necessary services to support planned urban land uses pursuant to county General Plan policies and the Land Use Diagram (see Figure 4-4).

Water-dependent industrial is a potential long-term use within the Collinsville area, particularly to the east of Collinsville and buffered from the existing community. Approximately 1,350 acres of land are designated for this use on the Land Use Diagram. Other future uses include environmental education and recreation uses associated with Collinsville's location on the Delta. A lack of existing infrastructure, including inadequate industrial transportation, is a key limiting factor for any future development of this area.

Policies in the Land Use Element specifically guide new urban growth toward municipal areas. The county commits to working with existing cities to designate land as MSAs to adequately accommodate growth in the county and ensure that development occurs in a logical manner. Industrial development should not conflict with adjacent and surrounding agricultural activities and should protect water quality and marshland and wetland habitats.

Residential development is to be clustered to preserve agricultural lands, natural resource areas, and environmental quality. No additional rural residential development is proposed within the Delta Secondary Zone. According to the General Plan, future rural residential development is to occur in undeveloped areas zoned and designated for rural residential uses and where rural residential development has already been established, then in undeveloped areas designated but not zoned for rural residential use and where rural residential development has already occurred, then in undeveloped areas designated for rural residential use.

Solano County recognizes the value of agriculture as irreplaceable resources for present and future generations and as an economic generator. Agricultural parcels are to be maintained at a sufficient minimum parcel size so as to remain a farmable unit. Agricultural preserves and contracts established under the Land Conservation Act (Williamson Act) are to be consolidated in the county and agricultural preserves and contracts in agricultural, watershed, and marshland areas are to be retained. In the event that agricultural land is proposed to be changed from an agricultural use to a nonagricultural use, either through a General Plan amendment or an application for a development, farmland conversion mitigation would be required. To further preserve agricultural uses, the county is exploring a voluntary transfer of development rights program to help protect agricultural resources by guiding development to more suitable areas. The General Plan also supports the long-term viability of commercial agriculture while discouraging inappropriate development of agricultural lands within the Delta. The General Plan also seeks to maintain water resource quality and quantity for the irrigation of productive farmland so as to prevent the loss of agriculture related to competition from urban water consumption internal or external to the county. Environmentally sensitive agricultural development is also encouraged through the requirement that agricultural practices be conducted in a manner that minimizes harmful effects on soils, air and water quality, and marsh and wildlife habitat. Recreation and open space activities that are complementary and secondary to the primary agricultural activities on the land are supported throughout the county. The Resources Element contains goals and policies to protect biological resources, marsh and Delta areas, minerals, scenic resources, cultural resources, recreational resources, energy resources, community separators, and water resources and quality. The protection and enhancement of the county's natural habitats and diverse plant and animal communities, particularly occurrences of special-status species, wetlands, sensitive natural communities, and habitat connections are strongly encouraged.

The preservation and enhancement of diversity of habitats in the marsh and the Delta to maintain unique wildlife resources are encouraged. The restoration of historical marshes to wetland status is encouraged, either as tidal marshes or managed wetlands. When managed wetlands are no longer used for waterfowl hunting, restoring them as tidal marshes is favored.

The General Plan requires that public and private management and development activities within the Primary Zone of the Delta be consistent with the goals, policies, and provisions of the Land Use and Resource Management Plan for the Primary Zone of the Delta as adopted and as may be amended by the DPC. Seasonal flooding and agricultural practices on agricultural lands in the Delta are to be done in cooperation with landowners to incorporate “best management practices” to maximize wildlife use of lands in the Delta. The continued recreational use of the land and waters of the Delta is to be promoted, including fishing and boating. Needed recreational facilities are to be constructed, maintained, and supervised as appropriate.

Water quality in the county, and particularly in the Delta, is to be protected for designated beneficial uses, including agriculture, municipal, water-dependent industrial, water-contact recreation, boating, and fish and wildlife habitat. Lands surrounding valuable water sources are to be protected, and open space lands are to be preserved to protect and improve groundwater quality, reduce polluted surface runoff, and minimize erosion. Groundwater recharge areas also are to be protected. A comprehensive stormwater management program is to be implemented to limit the quantity and increase the water quality of runoff flowing to the county’s streams and rivers.

Open space also is to be preserved and made accessible for use as public access to local waterways, nature trails, and bike paths. Additional trail and bike path linkages are to be provided on public lands and, in some cases, across private property.

Land use decisions are also governed by the county’s goal to protect against the loss of life and property from natural or human-caused hazards. Those hazards may include flooding, wildfires, earthquakes, land subsidence, ground failure, and rising sea levels caused by climate change. The natural functions of riparian corridors and water channels throughout the county are to be restored and maintained to reduce flooding, convey stormwater flows, and improve water quality. Open space and agricultural areas that are subject to natural flooding and are not designated for future urban growth are to be preserved, and permanent structures are prohibited from being in a designated floodway where such structures could increase risks to human life or restrict the carrying capacity of the floodway.

Flood management policies that minimize loss of life and property also are to balance with environmental health considerations of the floodplain and therefore not cause further erosion, sedimentation, or water quality problems in the floodplain area. With regard to climate change, greenhouse gas emissions reductions are to be promoted through the support of carbon-efficient farming methods (e.g., methane capture systems, no-till farming, crop rotation, cover cropping, residue farming); installation of renewable energy technologies; protection of grasslands, open space, and farmlands from conversion to other uses; and encouraging development of energy-efficient structures.

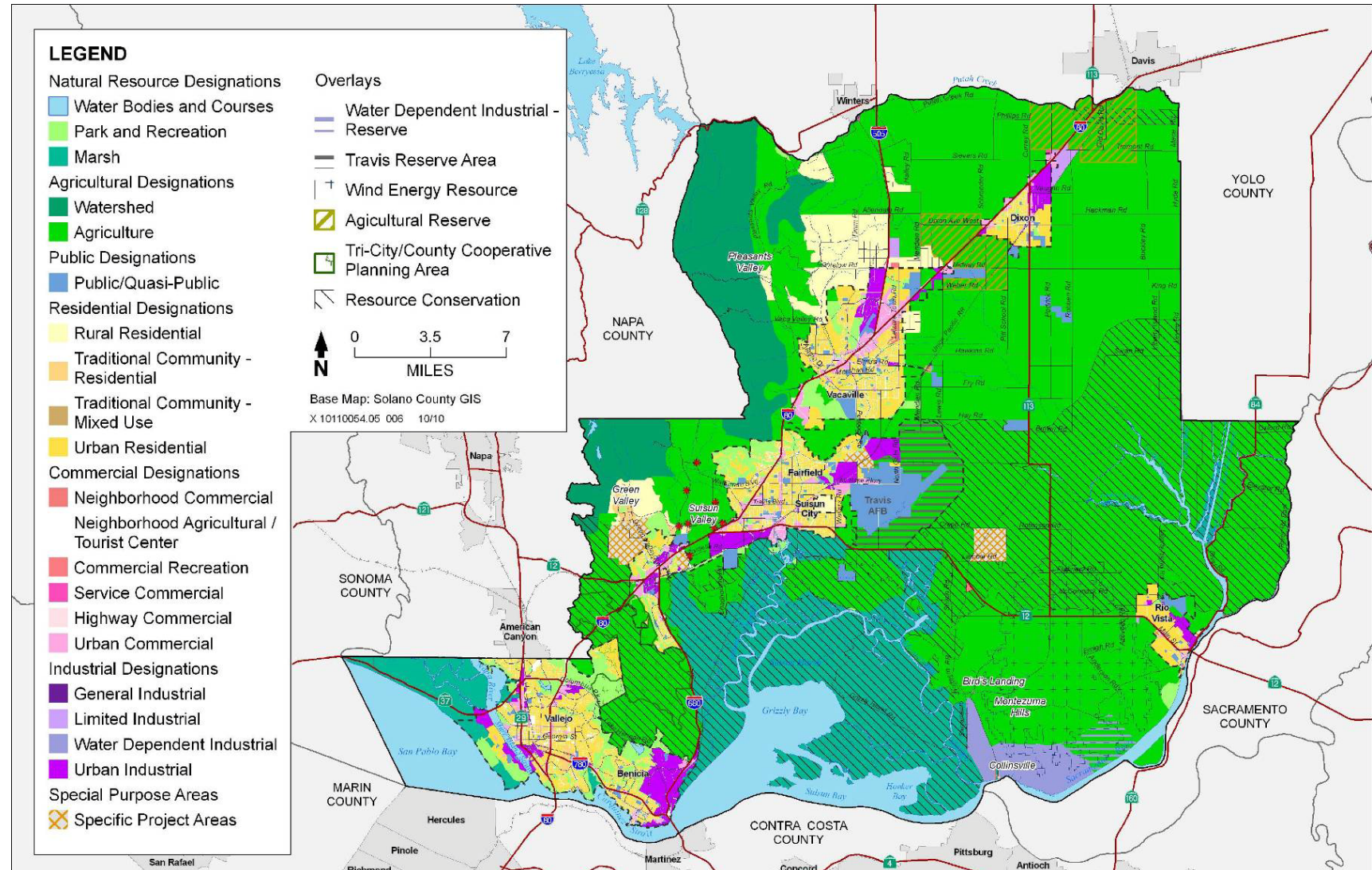
## **Solano Multispecies Habitat Conservation Plan**

The proposed Solano Multispecies HCP would establish a framework for complying with State and federal endangered species regulations while accommodating future urban growth, development of infrastructure, and ongoing operations and maintenance activities associated with flood control, irrigation facilities, and other public infrastructure undertaken by or under the permitting authority/control of the plan participants within Solano County over the next 50 years. The document is at the administrative draft stage.

Figure 4-4

Solano County General Plan Land Use Diagram

Source: Solano County General Plan



The HCP area consists of all of Solano County and 11.9 square miles (7,670 acres) of Yolo County. Solano County encompasses a total area of approximately 907 square miles (580,000 acres), of which, approximately 84,000 acres fall within the projected urban area of the six participating cities. The majority of the Delta within Solano County falls within Zone 3 of the HCP. Covered activities within this zone relate primarily to the implementation of the HCP reserve system, including adaptive management and monitoring, habitat enhancement, habitat restoration and construction, scientific collection, and other associated compatible activities on designated reserves/preserves, mitigation sites/banks, open space lands, and adjacent lands. Other covered activities within this zone include non-agricultural activities (i.e., communication towers, water supply reservoirs such as underground storage tanks, and recreation facilities management) carried out under the authority of or participation by the plan participants on lands outside of the designated urban boundaries.

The HCP outlines conservation goals, objectives and measures, permitted activities, mitigation standards, and conservation strategies. Covered activities may include urban development; irrigation district service area inclusions, expansions, and annexations; operation and maintenance activities of public facilities; non-agricultural activities carried out under the authority of or participation by plan participants on lands outside of the designated urban boundaries of the HCP; management, enhancement, habitat restoration/construction, monitoring, scientific collection, and associated compatible activities on designated reserves, mitigation sites/banks, and open lands and adjacent lands; and the relocation of covered species.

## **Solano County Climate Action Plan and Sea Level Rise Strategic Program**

The county is preparing a Climate Action Plan, consistent with direction set forth in the 2008 General Plan. The county recognizes that climate change has the potential to alter social, economic, and ecological conditions in Solano County. The Climate Action Plan will establish strategies and measures aimed at reducing greenhouse gas emissions and will allow the county to contribute to State and global climate protection efforts.

Responding to climate change also requires the county to prepare for and adapt to the already-foreseeable effects of global warming. For this reason, the County will also prepare a Sea Level Rise Strategic Program. This program will address the threat of sea level rise and propose adaptation strategies.

## **Suisun Marsh**

Although not in the Delta Primary or Secondary zones, the Suisun Marsh is a critical part of the Bay-Delta system and water-dependent habitat. The marsh comprises approximately 89,000 acres of tidal marsh, managed wetlands, and waterways. It is the largest remaining wetland near San Francisco Bay and includes more than 10 percent of California's remaining wetland area.

In 1974, the California Legislature passed the Suisun Marsh Protection Act, designed to preserve the Suisun Marsh from residential, commercial, and industrial development. The act directed the BCDC and California Department of Fish and Game (DFG) to prepare a protection plan for the Suisun Marsh "to preserve the integrity and assure continued wildlife use" of the marsh. The objectives of the protection plan are to preserve and enhance the quality and diversity of the Suisun Marsh aquatic and wildlife habitats and to ensure retention of upland areas adjacent to the marsh in uses compatible with its protection. The protection plan includes: 1) a primary management area encompassing the 89,000 acres of tidal marsh, managed wetlands, adjacent grasslands, and waterways over most of which BCDC has jurisdiction; and 2) a secondary management area of approximately 22,500 acres of significant buffer lands. Under specific guidelines in each area, Solano County is responsible for preparing and administering a local protection program. BCDC represents the State's interest, serving as the land use



1 permitting agency for major projects in the primary management area, and as an appellate body with  
2 limited functions in the secondary management area (BCDC, 2007).

3 Land use and marsh management findings and policies identify objectives for managing existing land  
4 uses and land and water areas, including preserving and enhancing marsh habitat; providing habitat  
5 attractive to waterfowl; improving water distribution and levee systems; encouraging agricultural and  
6 grazing practices consistent with wildlife use, waterfowl hunting, and elimination of mosquito breeding;  
7 and restoring historical wetlands.

8 Under the Suisun Marsh Protection Act, Solano County is required to bring General Plan policies,  
9 regulations, programs, and operating procedures into conformity with the provision of the Suisun Marsh  
10 Protection Act and the Suisun Marsh Protection Plan through the preparation of a local protection  
11 program. Solano County's component of the local protection program includes General Plan policies and  
12 other policies, programs, and regulations to preserve and enhance the wildlife habitat of the Suisun Marsh  
13 and to ensure retention of upland areas adjacent to the marsh in uses compatible with its protection  
14 (Solano County, 2008).

15 All public and private management and development activities within the primary and secondary  
16 management areas of the Suisun Marsh shall be consistent with the policies and provisions of the Suisun  
17 Marsh Protection Plan as adopted by the BCDC.

## 18 San Joaquin County

### 19 San Joaquin County General Plan

20 San Joaquin County covers approximately 1,406 square miles (900,000 acres). The county is bordered by  
21 Sacramento County to the north, Stanislaus County to the south, Amador and Calaveras counties to the  
22 east, and Contra Costa and Alameda counties to the west.

#### 23 *Land Use Designations*

24 Approximately 800,000 acres, or nearly 90 percent, of the  
25 county's land is used or available for agriculture (row and field  
26 crops, orchards, vineyards, and grazing lands). The remaining  
27 land is dominated by various types of development  
28 (approximately 59,000 acres), woodland and riparian habitats,  
29 and open water (lakes, rivers, and Delta waterways). The  
30 county consists of the incorporated cities of Escalon, Lathrop,  
31 Lodi, Manteca, Ripon, Stockton, and Tracy and the  
32 unincorporated communities of French Camp, Linden,  
33 Lockeford, Morada, Mountain House, Terminous, Thornton,  
34 and Woodbridge. The City of Tracy and the communities of  
35 Terminous and Thornton and a portion of the City of Stockton are within the legal Delta.



36 Unincorporated land within the county accounts for approximately 822,000 acres or 90 percent of all land  
37 in the county, while incorporated cities account for roughly 90,000 acres or approximately 10 percent.  
38 San Joaquin County designates land within the Primary Zone mainly as General Agriculture (A/G) and  
39 Resource Conservation (OS/RC). Other land use designations with the Primary Zone include City and  
40 Commercial Recreation (C/R). Figure 4-5 presents the General Plan Land Use Diagram.

## Policy Direction

The San Joaquin County General Plan 2010 was adopted by the San Joaquin County Board of Supervisors on July 29, 1992, and is currently being updated. The General Plan intends to provide guidance for future growth in a manner that preserves the county's natural and rural assets. Most of the urban growth is directed to existing urban communities. Growth is expected to occur in both urban and rural settings; however, the overwhelming majority of the new development will be in urban areas. Rural communities shall grow primarily through infill and should not be expanded. In addition, rural areas encompass all land outside designated communities and shall accommodate minimal growth because open space and agricultural preservation are paramount in these areas. The General Plan provides for the protection of these areas from unwarranted or premature urban encroachment through land use designations, policies, and zoning that restrict the permitted uses and intensity of development. To protect areas such as habitat areas for rare and endangered species, areas of significant vegetation, and wetlands, the General Plan requires detailed assessments of the resources. Development proposals that minimize impacts to the resources through clustering structures and providing setbacks from the resources are strongly encouraged.

San Joaquin County is increasingly becoming interdependent with communities outside its borders. The rapid development of the region and the unavailability of affordable housing near San Francisco Bay Area job centers have made the county's relatively low land prices attractive to new developers. At the same time, the county shares the environmentally sensitive and recreationally rich Delta with several other counties. Federal and State agencies also have jurisdiction over Delta resources. Coordinated management of the Delta is essential to preserve its many beneficial uses. The General Plan strongly recommends that new opportunities be sought to forge interjurisdictional cooperation to confront these problems.

In June 2008, San Joaquin County began a 36-month process to update the 1992 General Plan. The plan is the overarching development policy document that guides land use and development, housing, transportation, infrastructure, agriculture, and other policy decisions. The new General Plan will create a blueprint for growth during the planning period through 2030. In October and November 2008, the county held a series of 14 community workshops to identify issues and opportunities related to the General Plan update. Adoption of the General Plan update is anticipated for summer 2011 (San Joaquin County, 2008). The General Plan update will create a comprehensive and integrated policy framework with the following objectives:

- ◆ Reflect the unique values, geographies, and aspirations of San Joaquin County residents
- ◆ Ensure compliance with California planning law
- ◆ Respond to climate change
- ◆ Provide for sustainability
- ◆ Enhance the agricultural sector
- ◆ Diversify the economic base
- ◆ Protect the Delta
- ◆ Provide infrastructure for future growth
- ◆ Protect and enhance scenic landscapes and routes



## Local Land Use Policies and the Goals of the Act

The San Joaquin County General Plan 2010 addresses several of the eight policy objectives contained in the Act. The General Plan provides guidance for future growth in a manner that preserves the county's natural and rural assets. Policies and implementation measures address methods to more effectively use water and obtain new supplies. The General Plan provides for the protection of waterways from unwarranted or premature urban encroachment through land use designations, policies, and zoning that



restrict the permitted uses and intensity of development. To protect areas, such as habitat areas for rare and endangered species, development proposals that minimize impacts to the resources through clustering structures and providing setbacks from the resources are strongly encouraged. The General Plan also strongly recommends that new opportunities be sought to forge interjurisdictional cooperation to confront problems associated with the environmentally sensitive and recreationally rich Delta.

San Joaquin County designates land within the Primary Zone mainly as General Agriculture and Resource Conservation. The General Plan designates approximately 155,036 acres of land within the Primary Zone for agriculture, 31,742 acres for open space and recreation, and approximately 864 acres and 183 acres for City and Commercial land uses, respectively.

Significant population and employment growth is expected to occur within the county over the time frame of the new General Plan (i.e., 2030), and where this growth is planned will have an impact on many aspects of the county including agriculture, unincorporated communities, and employment opportunities. Although most growth is expected to occur within the county's cities, continued annexation of land into cities is expected to increase the amount of urban land uses within the Primary Zone.

## Habitat and Natural Communities Conservation Plans

The San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) was adopted in 2001 and provides comprehensive measures for compensating for and avoiding impacts on various biological resources and habitats, including agricultural land. In the SJMSCP, it is anticipated that 147,000 acres of various categories of open space lands (including agriculture, rangelands, and natural) in the county would be converted to uses other than open space between 2001 and 2051, based on full build-out of each of the general plans in the county and construction of all anticipated transportation and other public projects.



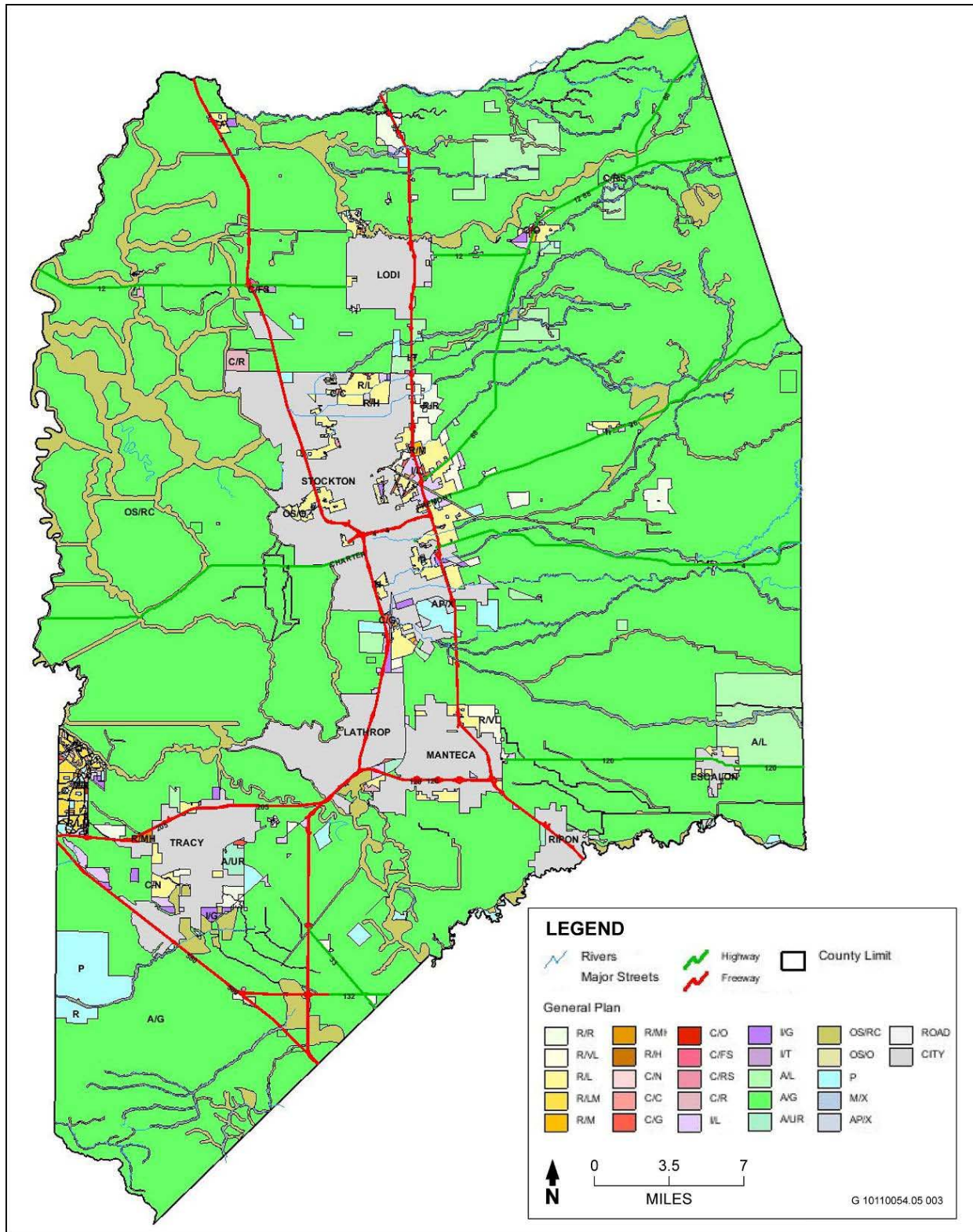
One of the primary goals of the SJMSCP is to preserve productive agriculture land where that goal is compatible with protecting and preserving lands with biological resources and habitat. Conservation lands under the SJMSCP are anticipated to be acquired, in large part, through the purchase of conservation easements on agricultural lands that will allow the landowner to retain ownership of the land and continue agricultural operations. The SJMSCP predicts that the ratio of conservation easements to fee-title lands under the SJMSCP would be approximately 90 percent conservation easements and 10 percent fee-title lands (San Joaquin Council of Governments Website, 2000).

The General Plan covers development activities undertaken within the jurisdictions of San Joaquin County and all of its cities. Transportation projects undertaken by Caltrans and the San Joaquin Council of Governments also will be covered by the SJMSCP. In addition, 5,340 acres is allocated for anticipated projects (e.g., annexations, general plan amendments). The SJMSCP also identifies projects and activities that are not covered by the SJMSCP.

### *French Camp Conservation Bank*

The French Camp Conservation Bank, owned by Sycamore Environmental, consists of 84 acres located at the confluence of French Camp Slough and the San Joaquin River south of Stockton. This bank preserves habitat and sells credit for valley elderberry longhorn beetle (USFWS Website, 2010).

1 **Figure 4-5**  
2 **San Joaquin County General Plan Land Use Diagram**  
3 *Source: San Joaquin County General Plan*



4

# Contra Costa County

## Contra Costa County General Plan

Contra Costa County covers approximately 805 square miles (515,200 acres), of which 732 square miles (468,500 acres) are land and the remainder is water. The area of Contra Costa County in the Delta is located in the East County. The East County extends into the southwestern part of the Delta and includes the incorporated cities of Antioch and Pittsburg in the east, Brentwood in the central area, Oakley in the north-central area, and the unincorporated communities of Bay Point in the northwest, Bethel Island in the north, Knightsen in the northwest, Discovery Bay in the south-central area, and Byron in the southwest.

### *Land Use Designations*

In the East Central County and East County Area, land is used primarily for agriculture and general open space. Roughly, 165,000 people lived in the East County in 1990 and 236,000 in 2000. Most of the population is concentrated in the Pittsburg-Antioch-Bay Point area. While 74,000 people live in the more sparsely settled "Other East County," many more live primarily in and around the cities of Pittsburg, Oakley, and Brentwood and the unincorporated communities of Byron, Knightsen, Bethel Island, and Discovery Bay. The East County Area has predominantly residential, agricultural, recreational, and open space uses. Development is concentrated in collections of small urban communities and mid-sized cities. Contra Costa County designates land within the Primary Zone as Delta Recreation (DR), Public/Semi-Public (PS), Agricultural Lands (AL), Agricultural Core (AC), and Parks and Recreation (PR). (See Figure 4-6 and Appendix A.)

### *Policy Direction*

A comprehensive update to the Contra Costa County General Plan was adopted on January 18, 2005, to guide future growth, development, and resource conservation through 2020. Amendments to the General Plan followed in 2005 to reflect changes to the land use map and the incorporation of the City of Oakley (Contra Costa County, 2005).

The Contra Costa County land use management framework is defined by two voter-approved measures. In 1990, voters passed Measure C in 1990 to establish the Urban Limit Line (ULL) in the county and the 65/35 Land Preservation Standard, the latter of which limits development to no more than 35 percent of the land in the county and preserves at least 65 percent of land for agriculture, open space, wetlands, parks, and other nonurban uses (Roche pers. comm. 2009). In November 2006, voters approved Measure L, which requires voter approval for any proposal to extend the ULL by more than 30 acres. Provisions of the ULL are in effect through 2026.



The establishment of the ULL is an integral feature of the General Plan. In general, the purpose of the ULL is twofold: 1) to ensure preservation of identified non-urban agricultural, open space, and other areas by establishing a line beyond which no urban land uses can be designated during the term of the General Plan; and 2) to facilitate the enforcement of the 65/35 Land Preservation Standard. The 65/35 standard operates on a countywide basis and therefore includes urban and non-urban uses within cities as well as unincorporated areas.



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During the term of the General Plan, properties that are located outside the ULL may not be redesignated through a General Plan amendment for an urban land use. In addition, those properties outside the ULL may be subject to various agricultural and open space preservation measures identified in the other portions of the General Plan. These measures could include: 1) permitting owners of large acre parcels to subdivide and sell off two 1-acre parcels from their property that could be developed with one residential unit on each parcel; 2) encouraging the dedication of open space and conservation easements; 3) implementing a transfer of development rights program; 4) requiring payment of an agricultural mitigation fee for conversion of agricultural land; 5) promoting non-urban “preservation” agreements between the county and cities to prevent annexation by cities of certain appropriate properties; 6) promoting special legislation for preferential tax treatment for agricultural and open space lands; and 7) establishing an “agricultural soils trust fund” to fund possible purchase of easements or title to agricultural or open space lands. In general, the purpose of these measures is to preserve open space and agricultural lands and contribute to the continued economic viability of agricultural property. Properties that are located inside the ULL would be governed by the land use designations contained in the General Plan.



The Delta is outside the ULL because of flood hazards, soil subsistence, lack of infrastructure, and lack of services. Except for Bethel Island and an area around Discovery Bay, most of the eastern portion of the county that is not within the sphere of influence of any city is outside the ULL (Roche pers. comm. 2009).

## Habitat and Natural Communities Conservation Plans

The East Contra Costa County HCP/NCCP was adopted in 2007 and provides a framework to protect natural resources in eastern Contra Costa County, while improving and streamlining the environmental permitting process for impacts on endangered species. The plan allows Contra Costa County; the Contra Costa County Flood Control and Water Conservation District; the East Bay Regional Park District; the cities of Brentwood, Clayton, Oakley, and Pittsburg; and the implementing entity to control endangered species permitting for activities and projects in the region. The HCP/NCCP helps to avoid project-by-project permitting that is generally costly and time consuming for applicants and often results in uncoordinated and biologically ineffective mitigation (East Contra Costa County Habitat Conservation Plan Association 2006).

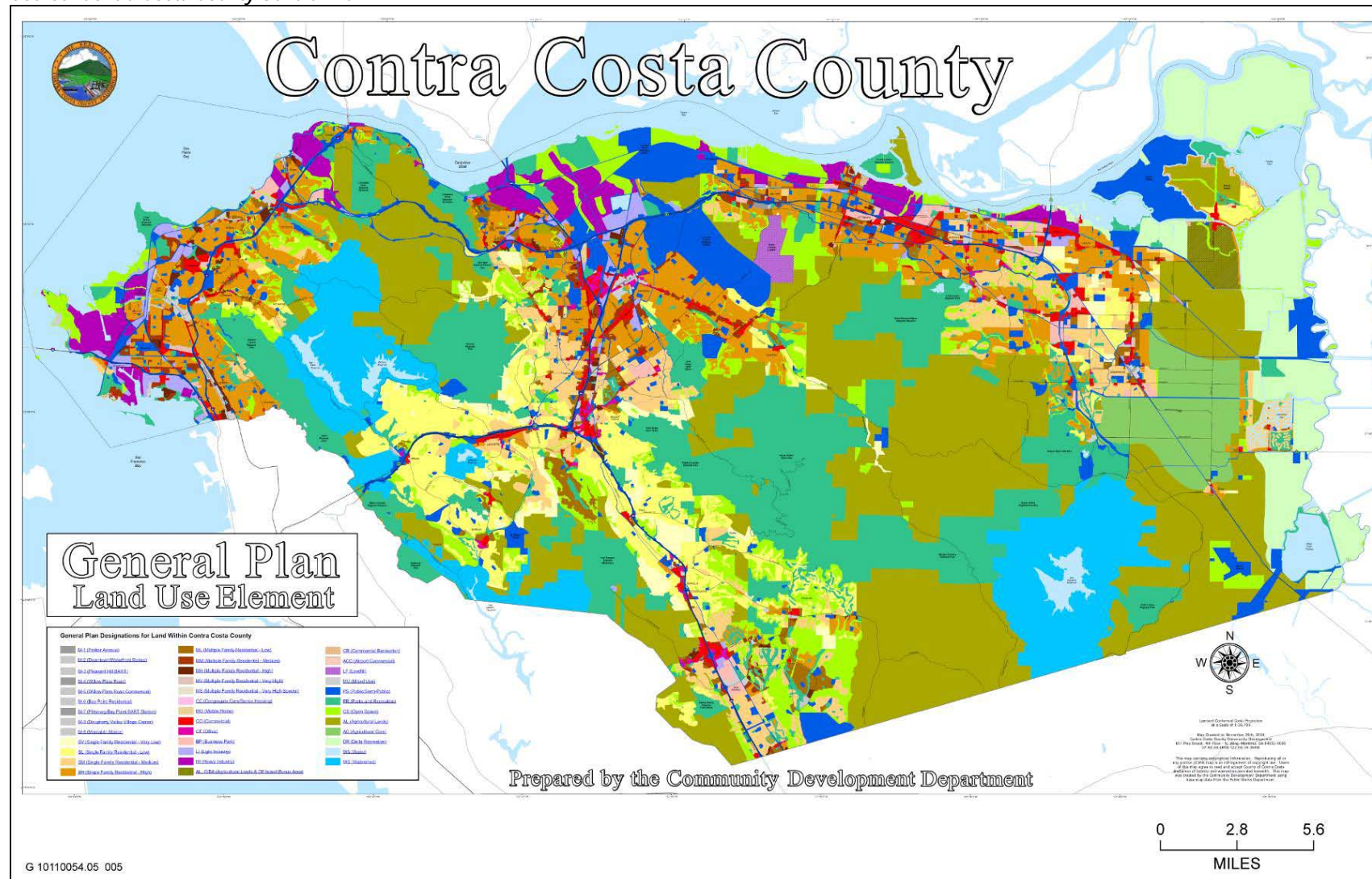


The HCP/NCCP is designed to accommodate reasonable and expected growth of the participating jurisdictions based on the current general plans for several local municipalities, including the cities of Clayton, Brentwood, Pittsburg, and Oakley, and Contra Costa County. However, participating jurisdictions have differing positions on where and how much future growth will occur. These differences may lead to changes in land use policies as the location of growth boundaries are discussed, as annexations transfer land use authority from one jurisdiction to another, and as general plans are updated or amended. To respond to potential changes in land use policy among the participating jurisdictions, the HCP/NCCP permit area could expand or contract as a result of local land use decisions made independently of the HCP/NCCP, provided that the revised permit area boundary is consistent with successful implementation of the HCP/NCCP conservation strategy.

Figure 4-6

## Contra Costa County General Plan Land Use Diagram

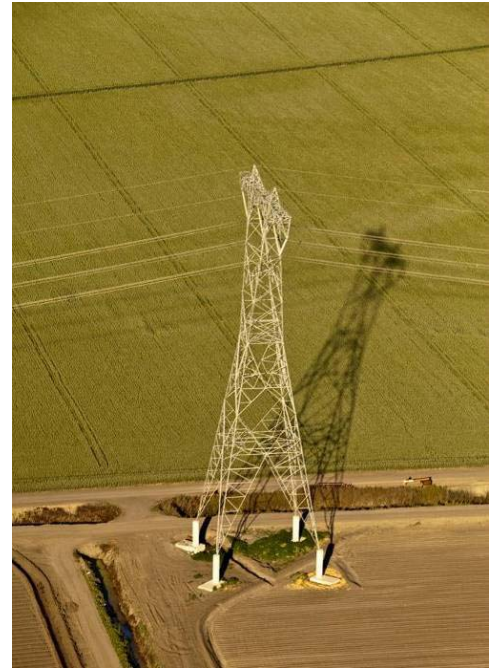
*Source: Contra Costa County General Plan*





# National Heritage Area

An important proposed plan under consideration in the Delta is designation as a National Heritage Area (NHA). In September 2010, Senator Diane Feinstein introduced legislation to establish the Sacramento-San Joaquin Delta National Heritage Area (Figure 4-7) under the “Sacramento-San Joaquin Delta National Heritage Area Establishment Act.” (Feinstein, 2010) The Sacramento-San Joaquin Delta NHA would encompass the Delta Primary Zone and areas beyond, including lands in Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties. An NHA expands on traditional approaches to resource stewardship by supporting large-scale, community centered initiatives that connect local citizens to the preservation and planning process (National Park Service [NPS], 2009a). The NPS provides technical, planning, and limited financial assistance to NHAs. The NPS is a partner and advisor, leaving decision-making authority in the hands of local people and organizations (NPS, 2009a). NHAs are designated by Congress, and each NHA is governed by separate authorizing legislation and operates under provisions unique to its resources and desired goals. For an area to be considered for designation, certain key elements must be present. First and foremost, the landscape must have nationally distinctive natural, cultural, historic, and scenic resources that, when linked together, tell a unique story about our country (NPS, 2009a).



The proposed designation is based on the Delta’s national significance as a natural resource and cultural heritage area. Some aspects of the Delta’s heritage that are nationally significant and could be interpreted through the NHA include its unique landscape, its habitat and water resources, its role in a pre-reclamation era, its use as a gold rush corridor, its link to water based recreation, its extensive reclamation history, its multicultural rural landscape, and its agricultural legacy (DPC, 2010). Ultimately it is up to the public to make decisions on which heritage themes should be incorporated into an NHA.

The NPS has outlined four critical steps that need to be taken prior to congressional designation of a national heritage area. These steps are (NPS, 2009b):

- ◆ Completion of a suitability/feasibility study
- ◆ Public involvement in the suitability/feasibility study
- ◆ Demonstration of widespread public support among heritage area residents for the proposed designation
- ◆ Commitment to the proposal from key constituents, which may include governments, industry, and private, non-profit organizations, in addition to area residents

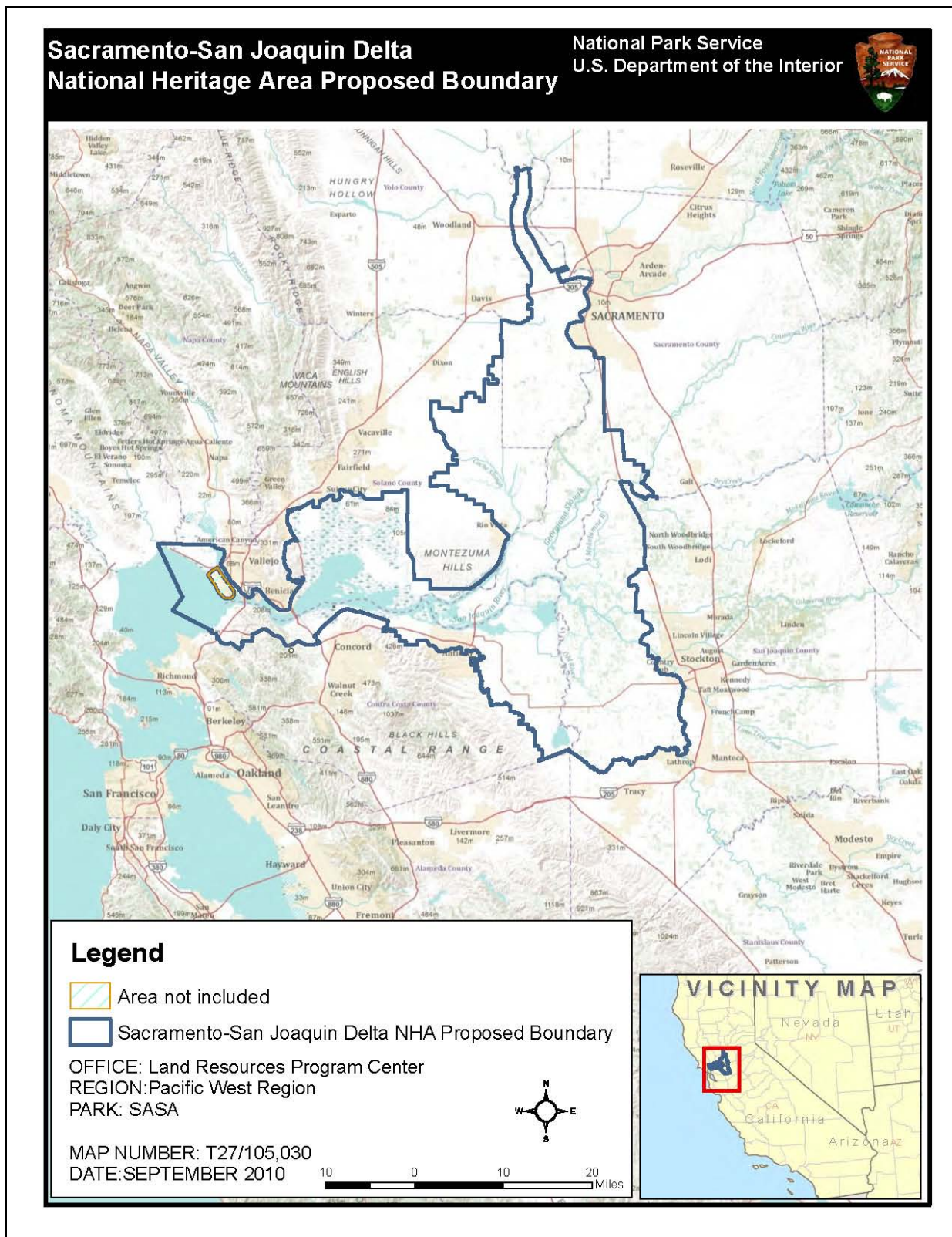
The following components are helpful in assessing whether an area may qualify as an NHA. A suitability/feasibility study should include analysis and documentation that illustrates (NPS, 2009b):

- ◆ The area has an assemblage of natural, historic, or cultural resources that together represent distinctive aspects of American heritage worthy of recognition, conservation, interpretation, and continuing use, and are best managed as such an assemblage through partnerships among public



- 1 and private entities, and by combining diverse and sometimes noncontiguous resources and active
- 2 communities
- 3 ♦ The area reflects traditions, customs, beliefs, and folk life that are a valuable part of the national
- 4 story
- 5 ♦ The area provides outstanding opportunities to conserve natural, cultural, historic, and/ or scenic
- 6 features
- 7 ♦ The area provides outstanding recreational and educational opportunities
- 8 ♦ Resources that are important to the identified theme or themes of the area retain a degree of
- 9 integrity capable of supporting interpretation
- 10 ♦ Residents, business interests, non-profit organizations, and governments within the proposed area
- 11 that are involved in the planning, have developed a conceptual financial plan that outlines the
- 12 roles for all participants including the federal government, and have demonstrated support for
- 13 designation of the area
- 14 ♦ The proposed management entity and units of government supporting the designation are willing
- 15 to commit to working in partnership to develop the heritage area
- 16 ♦ The proposal is consistent with continued economic activity in the area
- 17 ♦ A conceptual boundary map is supported by the public
- 18 ♦ The management entity proposed to plan and implement the project is described
- 19 The heritage area concept offers an innovative method for citizens, in partnership with local, State, and
- 20 federal government, and nonprofit and private sector interests, to shape the long-term future of their
- 21 communities. The partnership approach creates the opportunity for a diverse range of constituents to
- 22 come together to voice a range of visions and perspectives. Partners collaborate to shape a plan and
- 23 implement a strategy that focuses on the distinct qualities that make their region special (NPS, 2009a).
- 24 The designation has both tangible and intangible benefits. Heritage conservation efforts are grounded in a
- 25 community's pride in its history and traditions, and in residents' interest and involvement in retaining and
- 26 interpreting the landscape for future generations. It offers a collaborative approach to conservation that
- 27 does not compromise traditional local control over and use of the landscape. Designation comes with
- 28 limited financial and technical assistance from NPS (NPS, 2009a).
- 29 The DPC would be the management entity responsible for managing the Delta NHA. The DPC would
- 30 also be responsible for preparing and enforcing an NHA management plan.

1 **Figure 4-7**  
2 **Sacramento-San Joaquin Delta National Heritage Area Proposed Boundary**  
3 *Source: National Park Service*





## Section 5 Future Risks and Policy Issues

This section describes potential risks to the many different aspects of the Delta “as a place.” As a place where people live, work, and recreate, the Delta’s history and attractiveness have been closely linked to its great aesthetic appeal, natural resources, linkages between the coast and inland centers, and incredibly productive agricultural lands. These attributes lead to a number of economic, demographic, environmental, technological, and other factors that will affect future land use trends in the Delta and opportunities to ensure the Delta remains a viable place.

As an economic place, the Delta is dependent upon agriculture, the acreage of which is declining (see Tables 2-1 and 2-2), and recreation, which is not adequate by itself to support the Delta economy. Continued pressure exists to develop lands within the Delta, which adversely affects both agriculture and ecosystem restoration, as discussed below.

The Delta’s levee system continues to decline due to failing levee integrity and subsidence. This decline not only affects the levees but the entire Delta economy, ecosystem, way of life, and communities in the Delta. These will be at greater risk due to sea level rise and predicted climate changes that could intensify storms, leading to greater threats of levee failure, flooding, and inundation of Delta lands. This risk is real

and will intensify with time. There are few, if any, emergency response plans for individual communities to warn and evacuate people from flooding islands.

Access to Delta lands, and balancing access with the needs of property owners, is also an issue. Too much public access could jeopardize agricultural operations, while too little access could impede emergency response. Many residents have lived in the Delta for generations, understand and respect the inherent risks, and have learned good emergency practices. However, the past several decades have brought tens of thousands of new residents to the Delta. Many of these new residents do not know about or understand the risks and how to respond in emergency situations. They will require education on the realities of life in the Delta in the event a disaster strikes their communities.

Various county general plan policies described previously recognize potential risks to uses in their respective counties. **However, there is no overall recognition or strategy of how to deal with of all the potential specific threats to the Delta, its way of life, or its economy.**

Specifically addressed in this section are future risks to:

- ◆ Protection of Delta communities, culture, and economic sustainability
- ◆ Infrastructure, utilities and transportation
- ◆ Agriculture
- ◆ Industry
- ◆ Recreation and tourism
- ◆ Land protected by levees
- ◆ Water supply and quality

The identification of potential future risks draws heavily from information contained in the 2009 *California Climate Adaptation Strategy* (California Natural Resources Agency), the *Land Use and Resource Management Plan for the Primary Zone of the Delta* (DPC, 1995), the DPC's 2006 – 2011 Strategic Plan, and Delta Plan white papers that address ecosystem and flood risks. These potential risks arise from a combination of natural and human forces that have the potential to impact the Delta's economy and the communities that depend on the Delta's natural resources and agriculture.

**There appears to be a divide between local goals and policies and statewide goals and policies as they relate to the Delta. The general plans tend to focus inward, planning only for future uses and effects within their boundaries. Little consideration is made for how the county fits into the bigger picture, such as the Delta region or the state. Instead, county policies focus mainly on local goals such as continued agricultural production, economic development, water supply, and flood protection. Although there is some recognition of the interconnectedness of the Delta counties, most of the policies do not embrace a big-picture focus.**

An integrated approach to water, land use, and resource management planning can better achieve multiple objectives for the Delta by enhancing and restoring the cultural and economic sustainability of residents, businesses, agricultural and recreational interests while also maintaining a healthy ecosystem. Sufficient flood protection (including levee maintenance and improvement and subsidence mitigation) will be necessary to protect existing Delta communities, agriculture, and public infrastructure. However, such flood protection should not encourage additional conversion and urbanization of Delta lands beyond existing community boundaries. Local land use decisions also need to ensure that sufficient fresh water flow and water quality can be maintained in and through the Delta to meet the needs of Delta water users, recreation, and habitat preservation.

## Delta Communities and Culture

Since the mid-1800s, the Delta's economy and culture have been defined by managing water to create farmable land, moving people and goods between the San Francisco Bay and Central Valley along the

Delta's waterways, and the people from many countries who settled in the Delta to take advantage of its abundant natural resources. In the past 100 years, the importance of the Delta has been elevated by a growing network of infrastructure—roadways, fresh water conveyance, power lines, pipelines, etc.—that connect the Delta to other regions of the state. More recently, the population of some Delta communities has grown as people who work in urban employment centers in the San Francisco Bay, Sacramento, and Stockton regions relocate to enjoy the rural lifestyle offered by Delta communities. A growing appreciation of the Delta's character and role in California's history has moved the Legislature to act to protect and enhance the Delta "as an evolving place." The growing importance and value of the Delta to Californians and the inflow of new residents has introduced or increased inherent risks to these communities. Continued pressure exists to develop lands within the Delta, which adversely affects agriculture, the ecosystem, and ultimately recreation and tourism by people who come to enjoy the Delta's rural landscape and waterways. Access to Delta lands, and balancing access with the needs of property owners, is also an issue. Too much public access could jeopardize agricultural operations, while too little access could impede emergency response. Conversely, a decline in the suburban housing market in the periphery of the Delta could damage the local economy as it comes to rely on this tax base rather than on agricultural fields which once supported it.

As development expands, so does vital infrastructure and the population living in communities protected by levees. The possibility of inundation caused by levee breaks, whether triggered by a seismic event, oversaturation, or another structural failure, is high. Many residents have lived in the Delta for generations, understand and respect the inherent risks, and have learned good emergency practices. However, the past several decades have brought tens of thousands of new residents to the Delta. Many of these new residents do not know about or understand the risks and how to respond in emergency situations. They will require education on the realities of life in the Delta and how to properly prepare and respond in the event a disaster strikes their communities. Additionally, emergency response plans will need to be developed for individual communities to warn and evacuate people from flooding islands. Recently, ecosystem restoration plans or mitigation programs have encouraged the recreation of wetlands in many areas of the Delta. While ecosystem improvements are vital for the Delta's recreation and tourism economy, as well as for water supply, removing land from agricultural uses and restoring it to sustainable wildlife habitat would result in a changed landscape and economy in the Delta. Ecosystem restoration could result in the removal of some existing levees, allowing previously protected areas to flood. Economic benefits once derived from agriculture would be lost, and little may be available to replace this income to the community.

## Infrastructure

California's economy, including the economy of the Delta, relies on an extensive and costly infrastructure system that includes roads, highways, railroads, water storage and conveyance, drainage, pipelines, and electrical power production. This infrastructure was developed to accommodate California's highly variable climatic conditions, but it is frequently disrupted by natural disasters such as earthquakes, storms, and floods. Future climate change consequences expected to affect the Delta can directly and indirectly worsen these disasters and create new threats to the Delta's infrastructure, resulting in increased maintenance and repair expenditures, disrupted economic activity, and interrupted critical lifelines, ultimately reducing the overall quality of life in the Delta.

Agriculture, industry, recreation, and visitor-oriented activities, the lifeline of the Delta's economy, depend on these infrastructure systems. In addition, most working residents of the Delta do not have jobs in Delta communities, so interruptions to critical infrastructure could affect their ability to get to work.

The largest projected damages will come from sea-level rise threatening large portions of California's coastal and Delta transportation, housing, and energy-related infrastructure. Rising groundwater levels could threaten the integrity of many underground pipelines and the effective operation of these pipelines.



Impacts associated with construction of transmission lines and pipelines could depend on their current locations and replacement needs (for example, whether future replacement of utilities can be located in existing utility of transportation corridors, along property lines, and along the edges of fields to reduce possible disruption of agricultural operations).

## Agriculture

The future agricultural economy is threatened by potential conversion of farmland to non-farming purposes. This conversion could adversely affect the farmworkers, businesses, utilities, and tax-funded entities that form the basis of the agricultural economy. Wildlife that inhabit the farmland also could be adversely affected.

Subsidence of agricultural lands, particularly on Delta islands, is also a growing threat to the viability of agriculture. Many levees currently protect subsiding Delta islands from flooding. As islands continue to subside, there are increased risks for levee failure resulting in an increased risk of flooding. The costs to recover a flooded island could be great.

Encroachment of buildings and other structure into areas that may be needed in the future for flood control (such as setback levees) could adversely affect efforts to protect Delta lands from flooding and inundation. Local planning policies and zoning regulations affect whether development occurs in areas that may be needed in the future for levee and other flood control improvements and furthers the objectives of DWR's Central Valley Flood Protection Plan.

California's agriculture could be severely affected by the warming projected by the latest climate change models used by the California Natural Resources Agency. Some crop yields may increase with warming, while others may decrease. According to these models, many of today's top annual field crops such as wheat, cotton, maize, sunflower, and rice show declining yields later in the century due to rising temperatures. Conversely, the production of high-quality wine grapes is expected to benefit from a warmer climate because of a longer growing season and more favorable growing conditions in the short-term. At some point, however, the magnitude of the warming may become too large for certain grape varieties.

Although agriculture may benefit from higher levels of atmospheric carbon dioxide (CO<sub>2</sub>, which functions as a fertilizer and increases the efficiency of the plants' water use) and a lengthening of the growing season, these temperature changes may also lead to an increase in undesirable pests. Weeds and other invasive species are likely to migrate north due to temperature increases, while disease and pest pressures will increase with earlier spring arrival and warmer winters. In addition, crop-pollinator timing can also be affected by climate change, leading to a need for modifications in crop production.

The division of agricultural lands into smaller parcel sizes can adversely affect the viability of agriculture. While the minimum farmable parcel size depends on soil productivity and the value of agricultural produce, all of the Delta counties have experienced significant parcelization of agricultural lands and increasing rural residential development replacing agricultural uses and encroaching into agricultural areas.

Urbanization and development of agricultural areas has also been affected by local planning policies that do not limit areas for future urban growth, require that subdivided lands be limited to agriculturally-oriented land uses, provide for adequate buffers between agricultural and non-agricultural land uses, promote "right-to-farm" ordinances, and encourage the use of conservation easements.



## Industry

As noted previously, industries (some located in the Delta itself; other located nearby) that are connected to both inland and shoreline urban centers, ports, and transportation systems are important contributors to the Delta's economy. The Delta industries would be severely impacted by water quality degradation due to sea level rise, salt water intrusion, flooding, or reductions in water supplies. Transportation infrastructure is also at risk. Threats could include inundation of rail and highway corridors due to levee failure or sea level rise, sediment accumulation in the Sacramento or Stockton Deep Water Ship Channels, or interruption of natural gas and other energy infrastructure supplies that cross the Delta. If realized, these threats could isolate Delta industries and increase the challenge of getting goods and materials to market, severely impacting the Delta economy.

## Recreation and Tourism

As described previously, the Delta is a unique region that provides a host of outdoor and cultural recreation and tourism opportunities, bolstering the region's economy. However, development and environmental issues are threatening these recreational uses and the businesses that support them. For example, fishing is an important economic driver in the Delta and supports commercial guiding and charter boat opportunities. However, some of these fisheries are threatened as the Delta ecosystem has declined. This could significantly affect the future Delta economy, demonstrated by the cancellation of bass tournaments in 2008 and 2009. Another factor that threatens the recreation economy is the increasing cost of fuel for boats, which has reduced the number of boaters and water-skiers visiting the Delta.

Because the Delta is an important and unique historical, socio-economic, and environmental region in the world, California, and the Delta counties and communities in particular, have an opportunity to protect and restore the natural environmental, maintain working landscapes, and protect heritage places to better promote this region as a place to visit, further bolstering the visitor-oriented economy. New recreational facilities could be provided within the Delta on publicly owned land. Examples include pedestrian access on publicly owned levees adjacent to Brannan Island State Recreation Area; construction of new visitor facilities, interpretive facilities, and trails at the Stone Lake National Wildlife Refuge; and pedestrian trails, visitor facilities, and water access facilities at State Park's Delta Meadows.

## Land Protected by Levees

Delta levees are constantly holding back water, protecting land that is often below sea level and would otherwise be inundated by the tides. Delta levees protect critical infrastructure of statewide importance, including rail lines, petroleum product pipelines, electricity transmission lines, water pipelines, and highways. Delta levees also protect tens of thousands of acres of prime agricultural land and are a vital component of fish and wildlife habitat.

Levees in the Delta, as well as the lands behind them and the waterways they border, are at risk. Delta levees face a long list of potential threats: earthquakes, floods, subsidence, and sea-level rise are among the most notable. Delta levees face risk of high water overtopping during the wet season, particularly when large storms coincide with high tides. Low barometric pressures associated with large storms raise water surface levels in Delta and Suisun Marsh channels. Damage to levees could also occur due to sea level rise and other aspects of climate change. Each of these risks alone is cause for concern; however, together they represent a significant threat to the levees in the Delta and the people and property they protect. Each of these risks cannot be considered individually. The combination and/or coincidence of these risks must also be considered when developing a strategy to prioritize risk reduction actions.

The Delta is near a number of major faults, including the San Andreas, Hayward, and Concord-Green Valley faults. There is a 62 percent probability of at least one magnitude 6.7 or greater earthquake in the San Francisco Bay Region by 2032 (U.S. Geological Survey [USGS] 2010a). The Hayward-Rodgers

Creek and San Andreas fault systems have the highest probabilities of generating a magnitude 6.7 earthquake before 2032 (USGS, 2010a). Uncompacted sands, silts, clays, and peat soils forming Delta levees and levee foundations would likely liquefy during a seismic event. The Delta is at a high risk to ground shaking due to its higher water table and proximity to the Hayward Fault (Sacramento County, 2004). A key factor in the susceptibility to shaking is the water content of the soils; wet soils with shallow water tables are more likely to amplify the ground motion than dry soils with deep water tables (Sacramento County, 2004). Thus, the Delta is also at a higher risk due to its very nature of being an area of channels and sloughs, protected by natural and manmade levees (Sacramento County, 2004). Levee failures in the Delta could flood farmland and wildlife habitat and also interrupt water supply deliveries to urban and agricultural users and disrupt highway and rail use (Sacramento County, 2004). Although there has never been a documented levee failure from a seismic event, the Delta has not experienced a significant seismic event since the levees have been at their current size (Sacramento County, 2004). Subsequent levee failure and island flooding would have profound impacts on island agriculture, wetland habitats, and Delta water quality. Alteration of the Delta's natural systems has left communities more vulnerable to the anticipated effects of climate change, particularly changing precipitation patterns, storm surges, and tidal influences. Most land in the Primary Zone of the Delta is within a few feet of sea level or less (including significant lands below sea level) (Howitt, 2007). Even areas of the Delta on relatively higher ground will become more vulnerable to storm surges if predicted climate change results in more extreme and variable weather. Potable water supply could be impacted from saltwater intrusion and increasing salinity levels of Delta waters.

Business as usual will not be sustainable. Many studies have been commissioned to evaluate how the levee system in the Delta functions, the current condition of these levees, and how likely they are to successfully resist the threats they face. While the numeric results of these studies are widely disputed, their underlying conclusions are consistent and widely accepted. The Delta as it is today is not sustainable, particularly if we continue to use current policies and commitments of resources. The number of levees in the system, their general condition, the practices used to maintain and rehabilitate them, and the level of investment are simply not adequate to counter the number, severity, and likelihood of risks they currently face. The Flood Risk White Paper provides more information on these risks and the associated policy implications to the Delta.

## Water Supply and Quality

Many Delta communities, farmers, businesses, and individual property owners rely on clean, available groundwater and surface water to meet their needs. Groundwater levels and quality in parts of San Joaquin County are declining. Groundwater in San Joaquin County flows toward the Delta, but depressed groundwater levels have reversed this natural flow. This has led to the migration of saline groundwater eastwardly from the Delta. As saline groundwater continues to flow to the east, increasing numbers of wells are expected to be removed from service. The effect of declining groundwater levels has been increased pumping costs, reinvestment in deeper wells and larger pumps, and degradation of groundwater water quality.

Because of the high water table in the Delta, the use of septic and other individual onsite wastewater treatment systems could affect surface water quality if not properly designed, operated, and maintained. These systems could become increasingly vulnerable to flooding and inundation.

The number of unseaworthy and abandoned vessels in Delta waterways is creating a growing surface water quality problem and other environmental hazards. Peeling paint from boat hulls, rusting metal, and fuel tank leakage all contribute to poor Delta water quality. In addition, waterborne debris from users of these waterways affects water quality.

## Section 6 References

- CALFED Bay-Delta Program. 2010. Cities and Towns of the Delta. Available:  
[http://calwater.ca.gov/delta/about/Cities\\_and\\_Towns.html](http://calwater.ca.gov/delta/about/Cities_and_Towns.html). Accessed September 13, 2010.
- California Department of Finance. 2010. E-5 Population and Housing Estimates for Cities, Counties and the State, 2001-2010, with 2000 Benchmark. Sacramento, California. May 2010.
- California Department of Parks and Recreation (DPR). 2009. Brannan Island State Recreation Area – Fishing. Site accessed October 1, 2010. URL =  
[http://www.parks.ca.gov/default.asp?page\\_id=1320](http://www.parks.ca.gov/default.asp?page_id=1320).
- California Department of Water Resources (DWR). 2006. The Value of the Agricultural Output of the California Delta. Revised Draft Paper by Jim Rich, DWR, Division of Planning and Local Assistance. July 27, 2006, including spreadsheet DGAR RA JR 706 rev.xls.
- California Department of Water Resources (DWR). 2007. Status and Trends of Delta-Suisun Services Supplemental CD. May 2007.
- California Department of Water Resources (DWR). 2008. Technical Memorandum: Delta Risk Management Strategy (DRMS) Phase 1. Topical Area: Economic Consequences. Prepared by URS Corporation/Jack R. Benjamin & Associates, Inc.. May 2008.
- California Department of Water Resources (DWR). 2010. California Levee Database. Site accessed October 1, 2010. URL =  
[http://www.water.ca.gov/floodmgmt/lrafm/fmb/fes/levee\\_database.cfm](http://www.water.ca.gov/floodmgmt/lrafm/fmb/fes/levee_database.cfm).
- California Natural Resources Agency. 2009. *2009 Climate Adaptation Strategy*.
- California State Lands Commission (CSLC). 2010. Land Management Division Brochure. Site accessed October 1, 2010. URL =  
[http://www.slc.ca.gov/Division\\_Pages/LMD/Documents/LMD\\_Brochure.pdf](http://www.slc.ca.gov/Division_Pages/LMD/Documents/LMD_Brochure.pdf).
- City of Oakley. 2002. *City of Oakley 2020 General Plan*. Oakley, California. Adopted December 16, 2002. Site accessed February 11, 12, and 13, 2009. URL =  
<http://www.ci.oakley.ca.us/subPage.cfm?page=572363&CFID=10774581&CFTOKEN=27969498>.
- City of Stockton. 2009. Rough and Ready Island Redevelopment Project Area. City of Stockton Redevelopment Department, Stockton, California. Site accessed March 2009. URL =  
<http://www.stocktongov.com/redevelopment/pages/RRIslandRDA.cfm>.
- Contra Costa County. 2005. *Contra Costa County General Plan 2005–2020*. Adopted in 1991. Amended in 1996 and 2005. January 18, 2005. Martinez, California. Site accessed February 11, 12, and 13, 2009. URL = <http://www.co.contra-costa.ca.us/depart/cd/current/advance/GeneralPlan.htm>.

SECTION 6  
REFERENCES

DELTA AS A PLACE: LAND USE WHITE PAPER

- 1 County of Yolo. 2009. 2030 Countywide General Plan. Yolo County, CA. Adopted November 10, 2009.  
2 Page IN-5.
- 3 Delta Protection Commission (DPC) Web site. 2007. Accessed October 5, 2010. URL =  
4 <http://www.delta.ca.gov/>.
- 5 Delta Protection Commission (DPC). 1995. *Land Use and Resource Management Plan for the Primary*  
6 *Zone of the Delta*. Sacramento, CA.
- 7 Delta Protection Commission (DPC). 2010. National Heritage Areas, An Option for the Sacramento San  
8 Joaquin Delta; June 2010.
- 9 Delta Protection Commission (DPC. 2006. *Delta Protection Commission 2006-2011 Strategic Plan*.
- 10 Delta Stewardship Council (Council) Web site. 2010. Accessed October 5, 2010. URL =  
11 <http://www.deltacouncil.ca.gov/delta-basics.html>.
- 12 Delta Stewardship Council (Council). 2010. *Final Draft Interim Delta Plan*. Sacramento, CA.
- 13 East Contra Costa County Habitat Conservation Plan Association. 2006. *Final East Contra Costa County*  
14 *Habitat Conservation Plan/Natural Community Conservation Plan*, October 2006. Martinez,  
15 California. Site accessed February 2009. URL = [http://www.co.contra-costa.ca.us/depart/cd/](http://www.co.contra-costa.ca.us/depart/cd/water/HCP/archive/final-hcp-rev/final_hcp_nccp.html)  
16 [water/HCP/archive/final-hcp-rev/final\\_hcp\\_nccp.html](http://www.co.contra-costa.ca.us/depart/cd/water/HCP/archive/final-hcp-rev/final_hcp_nccp.html).
- 17 Family Water Alliance, Inc. 2010. Flood Control – History of Levee Construction.  
18 Site accessed October 1, 2010. URL = [http://www.familywateralliance.com/flood\\_const.html](http://www.familywateralliance.com/flood_const.html).
- 19 Feinstein, Senator Diane. 111<sup>th</sup> Congress, 2D Session. A Bill to establish the Sacramento-San Joaquin Delta  
20 National Heritage Area (“Sacramento-San Joaquin Delta National Heritage Area Establishment  
21 Act”).
- 22 Governor’s Delta Vision Blue Ribbon Task Force, 2008. *Delta Vision Strategic Plan*. Sacramento, CA.
- 23 Howitt, Richard, March/April 2007 “Delta Dilemmas: Reconciling Water-Supply Reliability and  
24 Environmental Goals,” *Agricultural and Resource Economics Update*, Giannini Foundation of  
25 Agricultural Economics, University of California, Vol. 10, No. 4.
- 26 Ironhouse Sanitary District. 2009. Jersey Island Fishing/Hunting/Hiking Permit. Oakley, California. Site  
27 accessed March 2009. URL = <http://www.ironhousesanitarydistrict.com/mainframe.html>.
- 28 McGowan, J. A., 1961. History of the Sacramento Valley. Lewis Historical Publishing Company, New  
29 York, NY.
- 30 Merritt, Jacob J. 1990. “Rigid Pavement Design.” *Journal of Highway Pavement Design*. Vol. 6, No. 2.  
31 May 26. p. 6.
- 32 Metropolitan Transportation Commission, 2010. *Change in Motion Final Transportation 2035 Plan*.
- 33 Mount, Jeffrey and Robert Twiss. 2004. *Subsidence, Sea Level Rise, Seismicity in the Sacramento-San*  
34 *Joaquin Delta: Report to the Levee Integrity Subcommittee of the California Bay-Delta Authority*  
35 *Independent Science Board*. December.
- 36 National Park Service (NPS). 2009a. National Heritage Areas. FAQ’s. Site accessed October 1, 2010.  
37 URL = <http://www.nps.gov/history/heritageareas/FAQ/>.

- 1 National Park Service (NPS). 2009b. National Heritage Areas Critical Steps and Criteria for becoming a  
2 National Heritage Area. Site accessed October 5, 2010. URL =  
3 <http://www.nps.gov/history/heritageareas/REP/criteria.pdf>.
- 4 Port of Stockton. 2009. The Port of Stockton. Stockton, California. Site accessed March 2009. URL =  
5 <http://www.portofstockton.com/right.html>.
- 6 Roche, P. Principal Planner, Contra Costa County Department of Conservation and Development,  
7 Martinez, California. Telephone conversation with Jeanine Hinde of EDAW, Sacramento,  
8 California, on the county's general plan and the urban limit line. February 18, 2009.
- 9 Sac Delta. 1998. Fishing. Site accessed October 1, 2010. URL =  
10 <http://www.sacdelta.com/fishing/index.html>.
- 11 Sacramento County. 2004. Sacramento County Multi-Hazard Mitigation Plan. Chapter 4.2: Vulnerability  
12 Assessment. December 2004. Accessed October 29, 2010. URL =  
13 <http://www.msa2.saccounty.net/dwr/Drainage/Section%204-2%20Vulnerability3rdFinal.pdf>.
- 14 Sacramento County. 2010. County of Sacramento website. Planning & Community Development. South  
15 Sacramento Habitat Conservation Plan.  
16 <http://www.msa2.saccounty.net/planning/Pages/SSHCPPlan.aspx>. Accessed September 30, 2010.
- 17 San Francisco Bay Conservation and Development Commission (BCDC). 2007. *Suisun Marsh Protection*  
18 *Plan*. Site accessed May 11, 2010. URL =  
19 [http://www.bcdc.ca.gov/laws\\_plans/plans/suisun\\_marsh#3](http://www.bcdc.ca.gov/laws_plans/plans/suisun_marsh#3).
- 20 Solano County General Plan website. 2010. Available <http://solanocountygeneralplan.net/>. Accessed  
21 September 27, 2010.
- 22 Solano County. 2008. *Solano County General Plan*. December 2008. Fairfield, California. Site accessed  
23 February 11, 12, and 13, 2009. URL = <http://solanocountygeneralplan.net>.
- 24 Trott, Ken. 2007. Agriculture in the Delta. August 10.
- 25 U.S. Census Bureau. 2010. American Fact Finder. Accessed October 18, 2010. URL =  
26 <http://factfinder.census.gov>.
- 27 U.S. Census Bureau. 2010. California – Place. GCT-T1. Population Estimates. Data Set: 2009 Population  
28 Estimates. Accessed on October 18, 2010. URL =  
29 [http://factfinder.census.gov/servlet/GCTTable?\\_bm=y&-geo\\_id=04000US06&-](http://factfinder.census.gov/servlet/GCTTable?_bm=y&-geo_id=04000US06&-_box_head_nbr=GCT-T1&-ds_name=PEP_2009_EST&-_lang=en&-redoLog=false&-format=ST-9&-mt_name=PEP_2009_EST_GCTT1R_ST2S&-_sse=on)  
30 [\\_box\\_head\\_nbr=GCT-T1&-ds\\_name=PEP\\_2009\\_EST&-\\_lang=en&-redoLog=false&-](http://factfinder.census.gov/servlet/GCTTable?_bm=y&-geo_id=04000US06&-_box_head_nbr=GCT-T1&-ds_name=PEP_2009_EST&-_lang=en&-redoLog=false&-format=ST-9&-mt_name=PEP_2009_EST_GCTT1R_ST2S&-_sse=on)  
31 [format=ST-9&-mt\\_name=PEP\\_2009\\_EST\\_GCTT1R\\_ST2S&-\\_sse=on](http://factfinder.census.gov/servlet/GCTTable?_bm=y&-geo_id=04000US06&-_box_head_nbr=GCT-T1&-ds_name=PEP_2009_EST&-_lang=en&-redoLog=false&-format=ST-9&-mt_name=PEP_2009_EST_GCTT1R_ST2S&-_sse=on).
- 32 U.S. Census Bureau. <http://www.census.gov/population/cencounts/ca190090.txt>.
- 33 U.S. Environmental Protection Agency (USEPA). 2006. *Wet Weather Discharges*.  
34 <http://cfpub.epa.gov/npdes/wetweather.cfm>. Accessed on March 27, 2006.
- 35 U.S. Geological Survey (USGS). 2010a. The Working Group on California Earthquake Probabilities.  
36 Summary of Earthquake Probabilities in the San Francisco Bay Region: 2003-2032. Accessed  
37 October 19, 2010. URL = [http://earthquake.usgs.gov/regional/nca/wg02/WG\\_summary.pdf](http://earthquake.usgs.gov/regional/nca/wg02/WG_summary.pdf).
- 38 U.S. Geological Survey (USGS). 2010b. *Water Science for Schools*. Site accessed October 15, 2010. URL  
39 = <http://ga.water.usgs.gov/edu/earthgwlandsubside.html>.
- 40 URS Corporation. 2006. 100-Year Flood Plain GIS Land Use Tables.





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# Appendix General Plan Land Use Designations



# Appendix

## General Plan Land Use Designations

The following details the land use designations identified in each county within the Primary Delta Zone. This information was obtained from the counties' general plans. It describes the land use, permitted uses, and in some cases, permitted intensities of development.

### Contra Costa County

Contra Costa County is bordered by Alameda County on the south, the San Joaquin River and Sacramento County on the north, Old River and San Joaquin County on the east, and Solano County on the west. The county comprises three distinct areas: the West County, the Central County, and the East County. The area of Contra Costa County in the Delta is located in the East County.

The following land use designations, as defined in the Contra Costa County General Plan, are within the Delta Primary Zone:

### Delta Recreation (DR)

This land use designation encompasses the islands and adjacent lowlands of the San Joaquin-Sacramento Delta, excluding Bethel Island and the community of Discovery Bay which have separate land use designations on the Land Use Map. Most of the lands designated Delta Recreation and Resources are within the 100-year floodplain mapped by the Federal Emergency Management Agency (FEMA), which means that the area is subjected to periodic flooding. Many of the Delta islands, and the tracts adjacent to the Delta, are currently in agricultural production of dry grains and other special crops suited to the soils and climate, such as asparagus. There are limited public water or sewer services currently available to the area.

The serious flooding danger in the area is due to the possibility that bay and river waters will overtop the existing levees during periods of storms or other high water, as well as the possibility that portions of the earthen levees may fail entirely during storms or earthquakes, resulting in the inundation of whole islands or tracts. The flooding danger is exacerbated by the effects of subsidence (sinking of Delta islands) and the rising of global sea waters caused by the "greenhouse effect." In recent years, during 1973, 1980, 1983, and 1986, one or more Delta island levees failed or were overtopped, and some of these were summer breaks that did not occur at a time of high storm runoff. Some islands in the Delta have been flooded two or three times since 1980. Upper Jones Island, in adjacent San Joaquin County, flooded in summer 2004.

1 Additionally, lands within this designation include lands with valuable wildlife habitat, some of which  
2 support species of ecological value to the county and the State. These areas are an important component  
3 of the Pacific Flyway, a major waterfowl migration route in North America.

4 Public preservation of portions of these resources is encouraged by this plan. Private utilization of the  
5 resources for hunting and fishing is appropriate, if the activities do not harm the long-term resource value  
6 of the Delta.

7 Due to their proximity to the Delta waterways, these lands have potential recreational value. The purpose  
8 of the Delta Recreation and Resources designation is to balance the recreational opportunities of the area  
9 against the need to allow only low intensity uses which will not subject large numbers of residents or  
10 visitors to flood dangers. Agriculture and wildlife habitat is to be considered the most appropriate uses in  
11 the area, with limited recreation uses allowed which do not conflict with the predominant agricultural and  
12 habitat uses.

13 The primary uses that are allowed in the Delta Recreation and Resources designation are those  
14 agricultural production and processing activities allowed in the Agricultural Lands designation.

15 Additional uses that may be allowed through the issuance of a land use permit include marinas, shooting  
16 ranges, duck and other hunting clubs, campgrounds, and other outdoor recreation complexes.

17 Conditional uses allowed in the Delta Recreation and Resources designation shall be limited to those low-  
18 to medium-intensity establishments that do not rely on urban levels of service or infrastructure, i.e., a  
19 public water or sewer system, and which will not draw large concentrations of people to flood-prone  
20 areas. Uses allowed within areas designated for Delta Recreation and Resources shall be subject to the  
21 following standards:

22 (1) the maximum permitted residential density shall be one unit per 20 acres;

23 (2) all recreational uses shall be accessible by a publicly maintained road;

24 (3) any subdivision of lands shall include conditions of approval which conform with the  
25 requirements of the "Ranchette Policy," which is outlined in the "Agricultural Resources"  
26 section of the Conservation Element;

27 (4) development shall not be permitted on lands designated by FEMA as floodprone until a risk  
28 assessment and other technical studies have been prepared and have shown that the risk is  
29 acceptable;

30 (5) all approved entitlements (land use permits, tentative, final, and parcel maps, development plan  
31 permits, and variances) and ministerial permits (building and grading permits) shall conform to  
32 the requirements of the Floodplain Management Ordinance (County Ord. #87-45), which are  
33 incorporated into this General Plan by reference;

34 (6) all entitlements shall include conditions of approval which require that a "flood-prone area"  
35 notification statement be included in the deeds for all affected properties. The same notification  
36 statement shall be recorded on the face of all subdivision maps, along with the specific elevations  
37 that will be required of all new building pads and habitable floors; and

38 (7) dock and marina standards as described in policy 3-48.



## **Parks and Recreation (PR)**

The “Parks and Recreation” designation includes publicly owned city, district, county, and regional parks facilities, as well as golf courses, whether publicly or privately owned.

Appropriate uses in the designation are passive and active recreation- oriented activities, and ancillary commercial uses such as snack bars, and restaurants. The construction of new privately owned residences or commercial uses, and the subdivision of land, are inconsistent with this General Plan designation.

## **Public/Semi-Public (PS)**

As the title implies, the “Public and Semi-Public” designation includes properties owned by public governmental agencies such as libraries, fire stations, schools, etc. This designation is also applied to public transportation corridors (freeways, highways, and the Bay Area Rapid Transit), as well as privately owned transportation and utility corridors such as railroads, PG&E lines, and pipelines. The largest properties in this category are those of the U.S. Naval Weapons Station in Concord and Port Chicago.

A wide variety of public and private uses are allowed by this General Plan category. However, the construction of private residences or private commercial uses, and the subdivision of land, are not considered compatible with this designation.

## **Water (WA)**

This designation is applied to approximately 68 square miles of water in the San Francisco-San Pablo Bay and Sacramento-San Joaquin River estuary system which is within the County. The designation is also applied to all large inland bodies of water such as reservoirs.

Uses allowed in the “Water” designation area include transport facilities associated with adjacent heavy industrial plants, such as ports and wharves; and water-oriented recreation uses such as boating and fishing.

The construction of new residences or commercial uses and the subdivision of land is inconsistent with this General Plan designation.

## **Open Space (OS)**

This General Plan designation includes publicly owned, open space lands which are not designated as “Public and Semi-Public,” “Watershed,” or “Parks and Recreation.” Lands designated “Open Space” include, without limitation, wetlands and tidelands and other areas of significant ecological resources, or geologic hazards.

The “Open Space” designation also includes privately owned properties for which future development rights have been deeded to a public or private agency. For example, significant open space areas within planned unit developments identified as being owned and maintained by a homeowners association fall under this designation. Also included are the steep, unbuildable portions of approved subdivisions which may be deeded to agencies such as the, East Bay Regional Park District but which have not been developed as park facilities. Other privately owned lands have been designated as “Open Space” consistent with adopted city General Plans.

The most appropriate uses in “Open Space” areas involve resource management, such as maintaining critical marsh and other endangered habitats or establishing “safety zones” around identified geologic hazards. Other appropriate uses are low intensity, private recreation for nearby residents. The construction of permanent structures, excluding a single-family residence on an existing legally established lot, not

oriented towards recreation or resource conservation, is inconsistent with this open space designation.  
One single family residence on an existing legal lot is consistent with this designation.

### Agricultural Lands (AL)

This land use designation includes most of the privately owned rural lands in the county, excluding private lands that are composed of prime soils or lands that are located in or near the Delta. Most of these lands are in hilly portions of the county and are used for grazing livestock, or dry grain farming. The category also includes non-prime agricultural lands in flat East County areas, such as outside Oakley, which are planted in orchards. Some of the Agricultural Lands east of Oakley and Byron are included in the 100-year floodplain, as mapped by FEMA.

The purpose of the Agricultural Lands designation is to preserve and protect lands capable of and generally used for the production of food, fiber, and plant materials. The title is intended to be descriptive of the predominant land-extensive agricultural uses that take place in these areas, but the land use title or description shall not be used to exclude or limit other types of agricultural, open space or non-urban uses such as landfills, except as noted below in the descriptions of “Agricultural Core,” “Delta Recreation and Resources,” “Watershed,” “Parks and Recreation,” and “Open Space.” The maximum allowable density in this category is one dwelling unit per 5 acres.

The uses that are allowed in the Agricultural Lands designation include all land-dependent and non-land dependent agricultural production and related activities. In addition, the following uses may be allowed by issuance of a land use permit, which shall include conditions of approval that mitigate the impacts of the use upon nearby agricultural operations through the establishment of buffer areas and other techniques:

- ♦ facilities for processing agricultural products produced in the County such as dairies, rendering plants, and feed mills;
- ♦ commercial agricultural support services which are ancillary to the agricultural use of a parcel, such as veterinarians, feed stores, and equipment repair and welding; and
- ♦ small-scale visitor serving uses including small tasting rooms, stands for the sale of products grown or processed on the property, guest or “dude” ranches, horse training and boarding ranches, improved campgrounds, and “bed and breakfast” inns of five or fewer bedrooms which are on lots of 20 acres or more, extensive recreational facilities and private retreats.

The following standards shall apply to all uses allowed in the Agricultural Lands designation:

- (1) Any subdivision of lands shall include conditions of approval which conform with the requirements of the “Ranchette Policy,” which is outlined in the “Agricultural Resources” section of the Conservation Element (Chapter 8); and
- (2) Residential and non-residential uses proposed in areas of special flood hazards, as shown on FEMA maps, shall conform to the requirements of the County Floodplain Management Ordinance (County Ord. #87-45) and the further requirements outlined in the “Delta Recreation” section (d) (5) below.

### Agricultural Core (AC)

This designation applies to agricultural lands that are composed primarily of prime (Class I or II) soils in the Soil Conservation Service Land Use Capability Classifications, which are considered the very best soils for farming a wide variety of crops. Lands designated as Agricultural Core are located in East

County outside the ULL to the east, south, and west of the City of Brentwood. Much of the land in this designation is under active cultivation of intensive row crops, such as tomatoes and other vegetables. A portion of the Agricultural Core lands are included within the 100-year flood zone, as identified by FEMA.

The purpose of the Agricultural Core designation is to preserve and protect the farmlands of the County which are the most capable of, and generally used for, the production of food, fiber, and plant materials. Agricultural operations in the Agricultural Core shall, in accordance with Measure C - 1990, be protected by requiring a higher minimum parcel size than the Agricultural Lands designation, to attempt to maintain economically viable, commercial agricultural units. The creation of small uneconomical units will be discouraged by land use controls and by specifically discouraging minor subdivisions and "ranchette" housing development.

The uses that are allowed in the Agricultural Core designation are the same as those allowed, without the issuance of a land use permit, in the Agricultural Lands designation, specified above. Except for an agricultural processing facility, which changes or alters an agricultural product from its natural state into an item for ultimate sale to the consumer, so as to increase the value of the agricultural product (also known as a value-added agricultural product); or, a farm market, which is accessory to an on-site agricultural operation used for direct sale to the consumer of locally grown agricultural products, value added agricultural items; or, a temporary event pursuant to the county's Temporary Events Ordinance (County Ord. 2005-25), none of the uses described as conditional uses in the Agricultural lands designation are considered appropriate in the Agricultural Core designation. A land use permit for the production and direct marketing of "value added" agricultural products (such as a winery in conjunction with a planted vineyard, or olive oil mill in conjunction with a planted orchard, including a tasting room and limited retail sales area associated with such uses) or a farm market for the direct sale to the consumer of agricultural products and value-added agricultural products produced on-site or proximate to the site, or a temporary event as defined in Chapter 82-44, County Ordinance Code, Title 8: Zoning), may be issued upon a determination that such facility or use and their accessory structures will not conflict with the goal of preserving and protecting the prime farmlands in the Agricultural Core. This Plan discourages the placement of public roadways or new utility corridors which would adversely affect the viability of the Agricultural Core if economically feasible alternatives exist.

Residential uses are allowed in the Agricultural Core according to the following standards (in accordance with Measure C - 1990):

- (1) the maximum permitted residential density shall be one unit per 40 acres;
- (2) subdivision of land which would create a cluster of "ranchette" housing is inconsistent with this plan; and
- (3) residential and non-residential uses proposed in areas of special flood hazards, as shown on FEMA maps, shall conform to the requirements of the County Floodplain Management Ordinance (County Ord. #87-45) and the further requirements outlined in the "Delta Recreation and Resources" section (d) (5) below.

## Light Industry (LI)

This designation allows light industrial activities such as processing, packaging, machinery repair, fabricating, distribution, warehousing and storage, research and development, and similar uses which emit only limited amounts of smoke, noise, light, or pollutants. The following standards apply:

- (1) maximum site coverage: 50 percent
- (2) maximum building height: 50 feet

- (3) maximum floor area ratio: 0.67  
(4) average employees per gross acre: 60 employees

### Single Family Residential – Medium (SM)

This designation allows between 3.0 and 4.9 single family units per net acre. Sites can range up to 14,519 square feet. With an average of 2.5 persons per household, population densities would normally range from about 7.5 to about 12.5 persons per acre.

Primary land uses which shall be permitted in this designation include detached single-family homes and accessory structures. Secondary uses generally considered to be compatible with low density homes may be allowed, including home occupations, small residential care and childcare facilities, churches and other similar places of worship, secondary dwelling units, and other uses and structures incidental to the primary uses.

### Single Family Residential – High (SH)

This designation allows between 5.0 and 7.2 single family units per net acre.

Sites can range up to 8,729 square feet. With an average of 2.5 to 3 persons per household, population densities would normally range from about 12.5 to about 22 persons per acre.

Primary land uses which shall be permitted in this designation include detached single-family homes and accessory structures. Secondary uses generally considered to be compatible with low density homes may be allowed, including home occupations, small residential care and childcare facilities, churches and other similar places of worship, secondary dwelling units, and other uses and structures incidental to the primary uses. In addition, in specified areas of the County with conventional zoning, attached single family units (duplexes or duets) may be allowed.

### Commercial (CO)

This designation allows for a broad range of commercial uses typically found in smaller scale neighborhood, community and thoroughfare commercial districts, including retail and personal service facilities, limited office and financial uses.

The following standards shall apply to uses in this designation:

- (1) maximum site coverage: 40 percent  
(2) maximum building height: 35 feet  
(3) maximum floor area ratio: 1.0  
(4) average employees per gross acre: 160 employees

## Sacramento County

Sacramento County encompasses approximately 775 square miles (496,083 acres) and is located in the middle of the 400-mile-long Central Valley. The county is bordered by Contra Costa and San Joaquin counties to the south, Amador and El Dorado counties to the east, Placer and Sutter counties to the north, and Yolo and Solano counties to the west. Sacramento County extends from the Delta between the Sacramento and San Joaquin rivers north to about 10 miles beyond the State Capitol building and east to the Sierra Nevada foothills.

The following land use designations, as defined in the Sacramento County General Plan, are within the Delta Primary Zone:

## Low Density Residential

This designation provides for areas of predominantly single family housing with some attached housing units. It allows urban densities between one and twelve dwelling units per acre, resulting in population densities ranging from approximately 2.5 to 30 persons per acre. Typical low density development includes detached single family homes, duplexes, triplexes, fourplexes, townhouses, lower density condominiums, cluster housing, and mobile home parks.

## Industrial Intensive

This land use designation allows for manufacturing and related activities including research, processing, warehousing, and supporting commercial uses, the intensive nature of which require urban services. Industrial Intensive areas are located within the urban portion of the county and receive an urban level of public infrastructure and services. Floor Area Ratios range from 0.15 to 0.80.

## Open Space and Agriculture

Open Space and Agricultural designations have additional intent and objective sections and policies in the Open Space and Conservation Elements.

## Recreation

The Recreation designation provides areas for active public recreational uses, including community parks, County parks, and activity areas within the American River Parkway. Some facilities types are too small or numerous to be identified on the Land Use Diagram, but they may be in the text of the Plan mapped at a more detailed scale. The Recreation land use designation may also apply to lands within floodplains in urbanizing areas. Pursuant to adoption of a Master Drainage Plan it would be appropriate to modify the Recreation designation to reflect the more precise land use designations established in the Master Drainage Plan.

## Agricultural Cropland

This designation represents agricultural lands most suitable for intensive agriculture. The agricultural activities included are row crops, tree crops, irrigated grains and dairies. The designation is generally limited to areas where soils are rated from Class I to Class IV by the Soil Conservation Service, or are classified Prime, Statewide, or Unique significance by the State of California Conservation Department. These lands have at least some of the following attributes: deep to moderately deep soils, abundant to ample water supply, distinguishable geographic boundaries, absence of incompatible residential uses, absence of topographical constraints, good to excellent crop yields, and large to moderate sized farm units. These attributes indicate the need for ambitious preservation policies and techniques. The Agricultural Cropland designation allows single family dwelling units at a density no greater than 40 acres per unit.

## Agricultural-Residential

The Agricultural-Residential designation provides for rural residential uses, such as animal husbandry, small-scale agriculture, and other limited agricultural activities. This designation is typical of established rural communities where between one and ten acres per unit is allowed, resulting in a development density of 2.5 to 0.25 persons per acre.



## San Joaquin County

San Joaquin County occupies a central location in California's vast agricultural heartland, the San Joaquin Valley. The county encompasses nearly 920,000 acres (or about 1,440 square miles) of relatively level, agriculturally productive lands. The foothills of the Diablo Mountain Range define the southwest corner of the county, and the foothills of the Sierra Nevada lie along the county's eastern boundary. The following land use designations, as defined in the San Joaquin County General Plan, are within the Delta Primary Zone:

### General Agriculture (A/G)

Areas generally committed to agriculture with viable commercial agricultural enterprises that require large land areas to efficiently produce their crops.

### Resource Conservation (OS/RC)

Areas with significant resources that generally are to remain in open space.

### City and Commercial Recreation (C/R)

Recreation-oriented, intense (at least 100 acres and capable of accommodating more than 500 persons at one time) commercial activities and associated facilities.

## Solano County

Solano County extends from the shores of San Pablo Bay in the west to the heart of the Central Valley in the east and is centrally located between the San Francisco and Sacramento metropolitan regions. The county is bordered by Yolo County to the north and east, Sacramento County to the east, Contra Costa County to the south, and Napa County and the San Francisco Bay to the west. The county encompasses approximately 910 square miles consisting of 830 square miles of land and 80 square miles of water.

The following land use designations, as defined in the Solano County General Plan, are within the Delta Primary Zone:

### Agriculture (AG)

Provides areas for the practice of agriculture as the primary use, including areas that contribute significantly to the local agricultural economy, and allows for secondary uses that support the economic viability of agriculture. Agricultural land use designations protect these areas from intrusion by nonagricultural uses and other uses that do not directly support the economic viability of agriculture.

Agricultural areas within Solano County are identified within one of 10 geographic regions. Within these regions, uses include both irrigated and dryland farming and grazing activities. Agriculture-related housing is also permitted within areas designated for agriculture to provide farm residences and necessary residences for farm labor housing.

### Resource Conservation Overlay (RCO)

Identifies and protects areas of the county with special resource management needs. This designation recognizes the presence of certain important natural resources in the county while maintaining the validity of underlying land use designations. The overlay protects resources by (1) requiring study of potential effects if development is proposed in these locations, and (2) providing mitigation to support urban development in cities. Resources to be protected through this overlay are those identified through technical studies as the highest priority areas within the habitat conservation planning process.

Conservation measures used to achieve the County's resource goals vary based on the targeted resource. Removal of a Resource Conservation Overlay from a subject property may be possible through a General Plan amendment.

## Yolo County

Yolo County is bordered by Solano County on the south, Sacramento County and Sutter County to the east, Colusa County to the north, and Lake County and Napa County to the west.

The following land use designations, as defined in the Yolo County General Plan, are within the Delta Primary Zone:

### Open Space (OS)

Public open space lands, major natural water bodies, agricultural buffer areas, and habitat. Characterized by "passive" and/or very low management uses as the primary land use, as distinguished from AG or PR land use designations which involve more intense management of the land. Detention basins allowed as ancillary use if designed with naturalized features and native landscaping, compatible with the open space primary use.

### Delta Protection Overlay (DPO)

Applies to the State-designated Primary Sone of the Sacramento-San Joaquin Delta, as defined in the Delta Protection Act. Land uses consistent with the base designation and the DPC's Land Use and Resource Management Plan are allowed.

### Agriculture (AG)

Full range of cultivated agriculture such as row crops, orchards, vineyards, dryland farming, livestock grazing, forest products, confined animal facilities, and equestrian facilities. Agricultural industrial – agricultural research, processing and storage; crop dusting. Agricultural commercial – roadside stands, "Yolo Stores", wineries, farm-based tourism (e.g., u-pick, dude ranch, lodging), horse shows, rodeos, crop-based seasonal events; agricultural chemical and equipment sales. Pre-existing isolated restaurants and/or stores (e.g. old stage stops and cross-roads) serving rural areas. Farmworker housing. Surface mining. Incidental habitat.

### Agricultural District Overlay (AGO)

Applies to designated agricultural districts. Land uses consistent with the base designation and the district specifications are allowed.

### Within Community of Clarksburg (all with Agricultural District Overlay):

#### *Residential Rural (RR)*

Large lot rural living. Detached single-family units. Attached and/or detached second unit or duplex allowed.

#### *Residential Low (RL)*

Traditional neighborhood living. Detached single-family units. Attached and/or detached second unit or duplex allowed. Triplexes and fourplexes allowed when designed to be compatible with adjoining single-family homes. Small compatible neighborhood serving retail and office allowed as ancillary use.

1     ***Residential Medium (RM)***

2     Dense urban living. Detached and attached single family and multi-family units. Small compatible  
3     neighborhood serving retail and office allowed as ancillary use

4     ***Residential High (RH)***

5     Apartments and condominiums. Attached multi-family units. Small compatible neighborhood serving  
6     retail and office allowed as ancillary use

7     ***Industrial (IN)***

8     Full range of light to heavy industrial/ manufacturing uses. Agricultural industrial allowed. Research and  
9     Development and biotechnology with manufacturing as primary use (more than 50 percent of total square  
10    footage). Storage facilities, contractor's yards, corporation yards, dismantling, etc.

11    ***Commercial Local (CL)***

12    Local-serving retail, office and service uses. Local-serving agricultural commercial allowed. Range of  
13    goods and services to meet everyday needs of residents within a community. Restricted to small floor  
14    plate users (less than 40,000 square feet ground floor). Upper floor and ancillary residential uses allowed.

15    ***Public and Quasi-Public (PQ)***

16    Public/governmental offices, places of worship, schools, libraries and other civic uses. Public airports  
17    (including related visitor services). Infrastructure including wastewater treatment facilities, municipal  
18    wells, landfills, and storm water detention basins.